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A

HISTORY

OF

BRITISH BIRDS.

BY THOMAS BEWICK.

VOL. II.

CONTAINING THE

HISTORY AND DESCRIPTION

OF

WATER BIRDS.

NEWCASTLE:

PRINTED BY CHARLES HENRY COOK,

FOR R. E. BEWICK: SOLD BY HIM, LONGMAN AND CO., LONDON;

AND ALL BOOKSELLERS.

1832.

PREFACE.

To point out the paths which lead to happiness, however remote they may lie from common observation, and at the same time to forwarn the inexperienced stranger against approaching those which terminate in vice and misery, is a task worthy of the most enlightened understanding. The learned in every age have laboured for these ends: they have set up their works like beacons and guide-posts, to direct their fellow-travellers in the journey of life. These are their marks, left behind them to witness their having lived; and although, like other more vain human monuments, they remain but for a while—since, in the great scale of time, every work of man, like an inscription on the sea-sand, is washed away by the return of the ceaseless wave—yet let not this reflection, so mortifying to human vanity, damp the ardour of doing good; for however temporary the efforts may be, they are not only valuable in themselves, (being records of usefulness laid up for the benefit of mankind) but are incitements also to the emulation of good example, whereby incalculable advantages may be derived to thousands yet unborn. The generality of men, indeed, are little affected by

observations of this sort: regardless of the voice of reason, and lost to a sense of duty, they neither know nor enquire why they were sent upon the stage of life; they stumble on still in darkness and error, and waste their days without a single effort to be useful to the community in which they live: they see not the wonders which the universe presents to stimulate them to reflect on the wisdom, the power, and the goodness which planned and support the whole. Despairing of their improvement, whose minds have thus been suffered to grow up into maturity uncultivated, we should rather direct our attention to the sowing of the seeds of knowledge in the minds of youth.

The great work of forming the man cannot be begun too early; and, agreeably with this sentiment, how many writers are there who spend their lives in contributing, in various ways, to turn the streams of instruction through their proper channels, into this most improveable soil! Taking children by the hand, from their leading-strings and go-carts, they direct their steps, like guardian-angels, in the out-set of life, to prevent their floundering on in ignorance to the end. In these undertakings the instructors of youth are often assisted by the fertile genius of the artist, who supplies their works with such embellishments as serve to relieve the lengthened sameness of the way. Among the many approved branches of instruction, the study of Natural History holds a distinguished rank. To enlarge upon the advantages which are derivable from a knowledge of the creation, is surely not necessary; to become initiated into this knowledge, is to become enamoured of its charms; to attain the object in view requires but little previous study or labour; the road which leads to it soon becomes strewed with flowers, and ceases to fatigue; a flow is given to the imagination, which banishes early prejudices, and expands the ideas; and an endless fund of the most rational entertainment is spread out, which

captivates the attention and exalts the mind. For the attainment of this science, in any of its various departments, the foundation may be laid, insensibly, in youth, whereon this goodly superstructure of knowledge can easily be raised at a more advanced period. In whatever way, indeed, the varied objects of this beautiful world are viewed, they are readily understood by the contemplative mind, for they are found alike to be the visible words of God. "The Creator, doubtless, did not bestow so much curiosity and exquisite workmanship and skill upon his creatures, to be looked upon with a careless incurious eye."* Could mankind be prevailed upon to read a few lessons from the great book of Nature, so amply spread out before them, they would clearly see the hand of Providence in every page; and would they consider the faculty of reason as the distinguishing gift to the human race, and use it as the guide of their lives, they would find their reward in a cheerful resignation of mind, in peace and happiness, under the conscious persuasion, that a good naturalist cannot be a bad man.

In ideas congenial with these originated the first incitements which drew forth the Histories of Quadrupeds and British Birds. From these humble attempts—for every attempt to depicture nature must fall short of the original—it is hoped that some useful instruction may be gathered, and at the same time a stimulus excited to further enquiry. But however this may prove,—"innocently to amuse the imagination in this dream of life, is wisdom; and nothing is useless which, by furnishing mental employment, keeps us for a while in oblivion of those stronger appetites that lead to evil."† To the rising generation these efforts to instruct and please are principally directed, and are set forth with

* Derham's Physico-Theology, Book xi. chap. 2.

† Goldsmith.

an ardent wish, that they may be found to deserve the notice of youth, and contribute to amuse and to inform them. May the reader, impressed with sentiments of humanity, on viewing the portraits, spare and protect the originals: and when these books shall become obsolete, or be lost in the revolution of time, may some other more able naturalist arise equally inclined to produce better to supply their place.

Thomas Bewick

Newcastle upon Tyne, December, 1805.

INTRODUCTION

TO THE

HISTORY OF BRITISH WATER BIRDS.

IN the preceding volume of British Land Birds, the characters of that part of the first great division of the feathered tribes, the beautiful tenants of the air, the woods, and the fields, have been described, and their figures faithfully delineated. Amongst these were enumerated not only the carnivorous and rapacious kinds, which, by the accuracy of their scent, discover putrid bodies at a vast distance, and those which, endowed with piercing sight, soar aloft in search of their living prey, and dart upon it from an immeasurable height, with the rapidity of an arrow; but also the various other kinds of land birds, which, although less noticed, are eminently useful to man, by clearing the earth and the atmosphere of myriads of insects, in every stage of their progressive growth, from the invisible egg to the period when they are enabled to flutter on the wing. These, together

with the other branches of this great family, whose lives may be said to be spent more innocently than those of the rapacious kinds, all contribute their services to man, by clearing the earth of the seeds of noxious plants, as well as the trees of innumerable destructive insects, with which they feed their young, and claim for themselves, meanwhile, but a small return of the produce of the fields and gardens, which too often is ungratefully begrudged them.

Nearly the whole of this amusing group appear to relieve each other, and are, in succession, the constant neighbours, or attendants on the habitations of men. They are the subtenants of the cultivated world, and most of them, especially those that are granivorous, may well be termed wild poultry, and are the valued property of the sportsman. Some of these, also, uniting with others of the soft-billed tribe, form the husbandman's cheerful band of choristers, whose comings and goings proclaim the seasons; while, by their notes, poured forth from every tree, and vale, and woody glen, they enliven the face of nature. But having described this division of birds in the former volume, we must now bid them adieu, with this testimony of their usefulness—that they are the industrious regulating little messengers of Providence, without whose assistance the plough and the spade would often find their labours bestowed in vain; and weak as these instruments may appear, without their aid, instead of a land of overflowing plenty, adorned with flowers and fruits, and trees and woods, in rich luxuriance, and in all their varied beauty, where every grove is made vocal with responsive praises, we should too frequently meet with nothing but the barrenness, and the silence, and the dreariness of a desert.

Leaving those denizens* of nature to enjoy their own native woods, the sheltering coppice, or extended plain, the

* "Behold the fowls of the air, for they sow not, neither do they reap, nor gather into barns, yet your heavenly father feedeth them."—See *Matt.* vi. 26.

task now assigned us is to delineate the figures, and to describe the characters of the other two divisions of this numerous family—the *waders* and the *swimmers;* these are generally found far removed from the cultivated world. In exploring the tract which leads us, step by step, to an acquaintance with them, we must travel through reeds and rushes, with doubtful feet, over the moss-covered, faithless quagmire, amidst oozing rills, and stagnant pools. The first division of these inhabitants of the marsh are called *waders.* All the genera, and the different species, of this division have divided toes: they are apparently fitted for living on land, but are furnished with propensities and appetites which direct them chiefly to seek their food in moist and watery places, or on the margins of lakes and rivers, and yet they avoid those depths, where it might seem to be found in the greatest abundance. Most of them have long bills, formed to perforate the soft mud and moist earth, and long legs, bare above the knees, whereby they are enabled to wade through shallow waters in search of food, without wetting their plumage. Others have shorter legs, feathered down to their knees, and bills of varied length: whence it may appear that these are more limited in their powers, and pick up only such insects or grasses, seeds or roots of aquatic plants, as are to be met with near the surface of the ground, or in shallow pools; whilst others again are known to plunge into the water, and by partial swimmings to extricate themselves from it, after they have seized their prey, whether fishes or insects. Some of this class, in the warmer or temperate climates, breed and rear their young in the fens, where they remain throughout the year: others again, but these are few, after the business of incubation is over, disappear, and are supposed to direct their flight northward; while others, and these by much the greater number, are known invariably to leave the north, and to migrate southward on the approach of the winter months,

and to return northward in the spring. It must be observed that the swamps and inland waters of temperate climes, are also stocked with a numerous set of inhabitants of the second class—the *swimmers*. Some of these, likewise, after having reared their young, migrate much in the same way as the *waders*.

The ornithologist, who does not content himself with bare names and appearance, in examining the economy of the various kinds of birds, and the structure of their several parts, will find ample room for the exercise of his labours in the most minute investigation; and although he can scarcely overlook the slow, and almost imperceptible degrees, by which nature has removed one class of beings from another, yet in his attempts to trace the relationship, or affinity, which one bears to another, he will, with his utmost care, find himself at a loss to ascertain that precise link in the chain, where the doubtful crossing line is drawn, and by which the various genera and species are to be separated. But, however, after he shall have examined a few gradations, upwards or downwards, he will more readily discover the modes of life which the several kinds are destined to pursue; and their ability to perform the various evolutions necessary for the procuring of their food, in that exactitude to which the Author of Nature hath formed them. In some of those which run on the surface of the soft mud, and can occasionally take the water, the indications of their ability for swimming are furnished very sparingly: these indications first appear in the breadth of the under sides of the toes, with the two outer toes joined by a small web. The scalloped membranes attached to the sides of the toes form the next advance: some are webbed to the nails, with deep indentations in the middle, between each toe; others have only three toes, all placed forwards, and fully united by webbed membranes: some have the addition of back toes, either plain, or with webbed appendages

to each; and others again have the four toes fully webbed together. The legs, in the most expert divers, are placed very far back; they are almost as flat and thin as a knife; and they are enabled to fold up their toes so closely, that the least possible resistance is made while they are drawing them forward to repeat their strokes in the water. Many of these divers are provided internally with a receptacle, seated about the windpipe, for a stock of air, which serves the purpose of respiration, whilst they remain under water: and the whole of the tribe of swimmers have their feathers bedded upon a soft, close, warm down; and are furnished with a natural oil, supplied from a gland in the rump. This oil they press out with their bills from a kind of nipple, and with it preen and dress their plumage, which is thereby rendered impenetrable to the water, and, in a great degree, to the most extreme cold.

Of the number of these birds, both waders and swimmers, a great proportion may not improperly be termed fresh-water birds, as they rear their young, and spend the greater part of their time inland. In this class are the *Ardea, Scolopax,* and *Tringa,* with divided toes—the *Fulica, Phalaropus,* and *Podiceps,* with finned feet; together with others of the web-footed kinds, chiefly of the genera of the *Mergus* and *Anas.* Among these various kinds, some species are found which only occasionally visit the sea-shore: others have not been noticed there at all; while others are seen there frequently, feeding on the beech: some, like little boats, keep within bays and creeks, near the shores; others, meanwhile, adventure into the ocean, and sport amidst its waves. To particularize these, with their various places of abode, and the times of their migrations, would here be tedious and unnecessary: they are noticed in the description of each bird.

The northern extremities of the earth seem as if they were set apart for the nations of the feathered race, as their

peculiar heritage—a possession which they have held coeval with creation. There, amidst lakes and endless swamps, where the human foot never trod, and where, excepting their own cries, nothing is heard but the winds, they find an asylum where they can rear their young in safety, unmolested, and surrounded by a profusion of plenty. This ample provision consists chiefly of the larvæ of gnats and other insects, with which the atmosphere must be loaded in that region, during the summer months. The eggs of these insects being deposited in the mud, and hatched by the influence of the unsetting summer's sun, they arise like exhalations, in multiplied myriads, and, as we may conceive, afford a never-failing supply of food to the feathered tribes. An equal abundance of food is also provided for the young of those kinds of birds which seek it from the waters, in the spawn of fishes, or the small fry, which fearlessly sport in their native element, undisturbed by the angler or the fisherman. In these retirements they remain, or only change their haunts from one lake or misty bog to another, to procure food, or to mix with their kind; and thus they pass the long enlightened season. As soon as the sun begins, in shortened peeps, to quit his horizontal course, the falling snows, and the hollow blasts foretell the change, and are the signals for their departure: then it is, that the widely-spreading winged host, having gathered together, in separate tribes, their plump well-fledged families, directed by instinctive knowledge, leave their native wilds, the arctic regions, that prolific source, whence these multiplied migrators, in flocks innumerable, and in directions like radii from the centre of a circle, are poured forth to replenish the more southern quarters of the globe. In their route, they are impelled forwards, or stop short, in greater or less numbers, according to the severity or mildness of the season, and are thus more equally distributed over the cultivated world; where man, habituated to consider every

thing in the creation as subservient to his use, and ever watchful to seize all within his grasp, makes them feel the full force of his power. Wherever they settle under his dominion, these pretty wanderers afford a supply to the wants of some, pamper the luxury of others, and keep the eager sportsman in constant employment.

Leaving the lakes and inland watery wastes, to pursue his researches by the brooks and the rivers, in their lengthened course to the estuaries and to the sea, the ornithologist is delighted with the view of the various clean-feathered inhabitants, feeding or preening themselves on the shores, swimming or diving in the current, or wheeling aloft on the wing. Many of these divide their time between the fresh and the salt waters, and serve as aerial guides, to direct his sight over the vast expanse, to other classes of birds that almost entirely commit themselves to the ocean; and with those tribes at certain seasons, these associate. This multifarious host, thus assembled in distinct families, is sometimes seen to cover the surface of the water to a vast extent: and of all these various families, those of the *Anas* genus, which keep much at sea, form the most considerable, amounting in the whole to ninety-eight species, besides varieties,* a number exceeding that of any other kind. And when we consider that each family of this genus is often seen in considerable flocks, and add them to those which may more properly be called sea-fowl—beginning with the *Alca*, and ending with the *Pelecanus*—consisting of nine distinct British genera and their species, we shall find the aggregate far to exceed in number the whole of the birds that are supported on the land. Whilst these fishers, in their flying squadrons, are viewed from the

* It is very probable that many of these varieties, as well, perhaps, as others that are accounted distinct species, may be a mixed breed, the produce of a kind somewhat different; and that this may also be the case with the varieties of other genera of birds.

cliffs and shores of the sea, soaring aloft, or resting secure on the louring precipice, the ear is often pierced with their harsh shrill cries, screamed forth in mingled discord with the roaring of the surge. Grating as their cries are, these birds are often hailed by the mariner, as his only pilots, while he is tossed to and fro, amidst solitary rocks, and isles inhabited only by the sea-fowl.

Although it is not certainly known to what places some of these kinds retire to breed, yet it is ascertained that the greater part of them hatch and rear their young on the rocky promontories and inlets of the sea, and on the innumerable little isles with which the extensive coast of Norway is studded, from its southern extremity—the Lindesness, or Naze, to the North Cape, that opposes itself to the Frozen Ocean. The Hebrides, or Western Scottish Isles, are also well known to be a principal rendezvous to sea-fowl, and celebrated as such by Thomson:—

> " Or where the northern ocean, in vast whirls,
> " Boils round the naked melancholy isles
> " Of farthest *Thule*; and the Atlantic surge
> " Pours in among the stormy *Hebrides*:
> " Who can recount what transmigrations there
> " Are annual made? What nations come and go?
> " And how the living clouds on clouds arise?
> " Infinite wings! till all the plume-dark air,
> " And rude resounding shore, are one wild cry."

Other parts of the world—the bleak shores and isles of Lapland, Siberia, Spitzbergen, Nova Zembla, Iceland, Greenland, &c., with the vast sweep of the Arctic Zone, are also enlivened in their seasons by swarms of sea-fowl, which range the intervening open parts of the seas to the shoreless frozen ocean. There a barrier is put to further enquiry, beyond which the prying eye of man must not look, and there his imagination only must take the view, to supply the place of

reality. In these forlorn regions of *unknowable* dreary space, this reservoir of frost and snow, where firm fields of ice, the accumulations of centuries of winters, glazed in Alpine heights above heights, surround the pole, and concentre the multiplied rigours of extreme cold: even here, so far as human intelligence has been able to penetrate, there appears to subsist an abundance of animals, in the air, and in the waters: and, perhaps, it may not be carrying conjecture too far to suppose that every region of the earth, air, and water, however ungenial the clime may appear to us, is replete with animals, suited, each kind, to the place assigned to it.

Certain it is, however, that the deeps of the frozen zone are the great receptacle whence the finny tribes issue, in so wonderful a profusion, to re-stock all the watery world of the northern hemisphere; and that this immense icy protuberance of the globe, this gathering together, this hoard of congealed waters, is periodically diminished by the influence of the unsetting summer's sun, whose rays being perpetually, though obliquely, shed, during that season, on the widely extended rim of the frozen continent, gradually dissolve its margin, which is thus crumbled into innumerable floating isles, that are driven southward to replenish the seas of warmer climates.*

Amidst these drifts of ice, and following this widely-spreading current, teeming with life, the whole host of sea-fowl find in the waters an inexhaustible supply of food: for the great movement, the immense southward migration of fishes is then begun, and shoal after shoal, probably as the removal of their dark icy canopy unveils them to the sun, are invited forth, and, guided by its light and heat, poured forward in thousands of myriads, in multitudes which set all calculation at defiance. The flocks of sea-birds, for their numbers baffle

* The same happens in the southern hemisphere, by the melting of the ice at the south pole.

the power of figures;* but the swarms of fishes, as if engendered in the clouds, and showered down like the rain, are multiplied in an incomprehensible degree: they may indeed be called infinite, if infinity were applicable to any thing created. Of all these various tribes of fishes, thus pressing forward on their southern route, that of the Herring is the most numerous. Closely embodied in resplendent columns of many miles in length and breadth, and in depth from the surface to the bottom of the sea, the shoals of this tribe peacefully glide along, and, glittering like a huge reflected rainbow, or Aurora Borealis, attract the eyes of all their attendant foes. Other kinds of fishes, in duller garbs, keep also together in bodies, but change their movements as may best suit their different modes of attack or defence, in preying upon, or escaping from each other as they pass along.† All these various tribes of fishes, but particularly that of the Herring, are in their turns encountered and preyed upon by the whole hosts of sea-fowl, which continually watch all their motions. Some are seen to hover over the shoals of fishes, and to wheel about in quick and glancing evolutions, and then to dart down like

* A bird may lay ten eggs and hatch them; but the roe of a herring is said to contain ten thousand.

† "Fishes are the most voracious animals in nature. Many species prey indiscriminately on every thing digestible that comes in their way, and devour not only other species of fishes, but even their own. As a counterbalance to this voracity, they are amazingly prolific. Some bring forth their young alive; others produce eggs. The viviparous *Blenny* brings forth 200 or 300 live fishes at a time. Those which produce eggs are all much more prolific, and seem to proportion their stock to the danger of consumption. Lewenhock affirms that the Cod spawns above nine millions in a season. The Flounder produces above one million, and the Mackarel above 500,000. Scarcely one in a hundred of these eggs, however, is supposed to come to maturity: but two wise purposes are answered by this amazing increase; it preserves the species in the midst of numberless enemies, and serves to furnish the rest with a sustenance adapted to their nature."—*Encycl. Britan.*

a falling plummet upon the selected object, which is gliding near the surface of the water, and instantly to rise, and devour the living victim on the wing. Others, equally alert and rapid in their pursuit, plunge and dive after their prey to greater depths; while the less active birds seem content to devour only such of the fishes as have been killed or wounded, and cast out on the flanks, or left in the rear of the main body.

In this great, this wonderful migration of birds and fishes, it is evident that they are amply provided on their way with an abundance of food, which they derive from each other; and that the shoals of fishes which the sea-fowl attend, are impelled southward by instinct, aided by currents, for the accomplishment of their mission. The birds, also, in their progress to fulfil the same high purpose, are by these enticed forward, as it were, to follow the seasons, and to wing their way to the posts assigned them in climes adapted to the fulfilling of the great duties of rearing their young, and of leading them forth to pursue the unalterable course of nature: and thus they spend out the varied year in the same ceaseless traversings on the globe.

Notwithstanding the prodigious multitudes of the inhabitants of the ocean, which are thus destroyed by each other, and by their winged enemies, yet, like a small toll, or like a measure of sand taken from the beach, there is no visible diminution of them; for although many divisions of the larger kinds, by keeping in the mid sea deeps, escape notice, and are dispersed like the fowl that follow to feed on them; yet others are mixed with the smaller sorts, and form part of those vast shoals which yearly present themselves to man, filling every creek and inlet of the northern shores, particularly those of the British isles; where this wonderful influx appears as if offered to give employment to thousands, and to supply an inexhaustible source of commerce: but this, like other overflowing bounties of Providence, seems to be too little

regarded : the waste, indeed, in this instance, is sufficient to feed half the human race.

It is a melancholy reflection, that, from man, downwards, to the smallest living creature, all are found to prey upon and devour each other. The philosophic mind, however, sees this waste of animal life again and again repaired by fresh stores, ever ready to supply the void, and the great work of generation and destruction perpetually going on, and to this dispensation of an all-wise Providence, so interesting to humanity, bows in awful silence.

In returning from these digressions to the subject of the present enquiry, let the imagination picture to itself countless multitudes of birds, wafted like the clouds, around the globe, which, in ceaseless revolutions, turns its convexities to and from the sun, causing thereby a perpetual succession of day and night, summer and winter; and these migrators will be seen to follow its course, and to traverse both hemispheres from pole to pole. To those, who, contemplating this world of wonders, extend their views beyond the common gropings of mankind, it will appear, that Nature, ever provident that no part of her empire should be unoccupied, has peopled it with creatures of various kinds, and filled every corner of it with animation. To follow her into all her recesses would be an endless task; but so far as these have been explored, every step is marked with pleasantness : and while the reflecting mind, habituated to move in its proper sphere, breaks through the trammels of pride, and removes the film of ignorance, it soars with clearer views towards perfection, and adores that Infinite Wisdom which appointed and governs the unerring course of all things.

....." Thus the men
" Whom Nature's works can charm, with God himself
" Hold converse; grow familiar day by day
" With his conceptions; act upon his plan,
" And form to his the relish of their souls."

Akenside's Pleasures of Imagination, Book 3, *l.* 630.

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BRITISH BIRDS.

Of the Heron.

The characters by which this genus is distinguished are, a long, strong, straight, sharp-pointed bill, nostrils linear, tongue pointed, toes connected by a membrane as far as the first joint, and the middle claw of some of the species pectinated. The thighs are half naked, and the legs long, by which, without wetting their plumage, they are enabled to wade deep in the water, where they stand motionless, awaiting the approach of the unsuspecting finny tribe, which they strike with their bill, admirably formed for the purpose, with the rapidity of a dart. Their body is slender, and covered with a very thin skin: their wings, which are very large and strong, contain twenty-four quills; the tail is short. They live mostly in lakes and fens, upon water animals: they also, occasionally, eat grain and herbage, and build chiefly upon the ground; some, however, in trees and cliffs.

THE CRANE.

COMMON CRANE.

(*Ardea Grus*, Linn.—*La Grue*, Buff.)

The bill is about four inches long, straight, pointed, and compressed at the sides, of a greenish black, turning lighter towards the point; tongue broad and short,

and horny at the tip. The forehead, to the middle of the crown, is covered with black hairy down, through which, if the bird be healthy, the skin appears red; behind this, it is nearly bare, and entirely so for the space of about two inches on the nape of the neck, which is ash grey. The sides of the head behind the eyes, and the hinder part of the neck, are white. The space between the bill and eyes, the cheeks, and fore part of the neck, are a blackish ash; greater wing coverts also blackish, and those farthest from the body, with the bastard wing and quills, quite black: the rest of the plumage is a fine waved light ash. From the pinion of each wing springs an elegant tuft of loose feathers, curled at the ends, which fall gracefully over the tail, in their flexibility, position, and texture, resembling the plumes of the Ostrich. The legs, and bare part of the thighs, are black. The Crane measures, when extended, from the tip of the bill to the toes, more than five feet in length, and weighs nearly ten pounds; its gait is erect, and its figure tall and slender.

The Crane differs from the Stork and Heron in the singular conformation of the windpipe, which, "entering far into the breast bone, (which has a cavity to receive it,) and being thrice reflected, goes out again at the same hole, and so turns down to the lungs."* It differs from them, also, in some other particulars, both internally and externally.

This species is widely spread, and, in its migrations, performs the boldest and most distant journies.

* Willoughby.

" Marking the tracts of air, the clamorous Cranes
" Wheel their due flight, in varied lines descried;
" And each, with out-stretched neck, his rank maintains
" In marshall'd order through the ethereal void."

In summer, they spread themselves over the north of Europe and Asia as far as the arctic circle; and in the winter are met with in the warmer regions of India, Syria, Egypt, &c., and the Cape of Good Hope. The course of their flight is discovered by the loud noise they make, for they soar to such a height as to be hardly visible to the naked eye. Like the Wild Geese, they form themselves into different figures, describing a wedge, a triangle, or a circle. They formerly visited the fens and marshes of this island, in large flocks, but they have now entirely forsaken them.

THE STORK.

WHITE STORK.

(*Ardea Ciconia*, Linn.—*La Cigogne*, Buff.)

The Stork is smaller than the Crane, but much larger than the Heron: the length, from the point of the bill to the end of the tail, is three feet six inches; and its breadth, from tip to tip, above six feet. The bill is of a fine red colour, and its length, from the tip to the corners of the mouth, seven inches; the legs and bare part of the thighs are also red; the former, below the knees, measure eight inches, the latter five. The plumage is of a bright white, except the quills, greater

coverts, and some of the scapulars, which are black; eyes dark and full, the orbits bare of feathers, and of a dusky reddish hue. The neck is long and arched; the feathers near the breast, like those of the Heron, long and pendulous; secondary quills nearly of the same length as the primaries, and when the wings are closed, they cover its short tail. The female nearly resembles the male. The nest is made of dry sticks, twigs, and aquatic plants, sometimes on large trees, or the summits of high rocky cliffs: this, however, seldom happens, for the Stork prefers the neighbourhood of populous places, where it finds protection from the inhabitants; who, for ages, have regarded both the bird and its nest as sacred, and commonly place boxes for them on the tops of the houses wherein to make their nests; to which they return, after the most distant journies, and every Stork takes possession of his own box. When these are not provided for them, they build on the tops of chimnies, steeples, and lofty ruins.

The Stork lays from two to four eggs, the size and colour of those of a Goose, and the male and female sit by turns. They are singularly attentive to their young, both together never quitting the nest, which is watched by one of them, while the other is seeking for, and bringing provisions, which the young receive with a sort of whistling noise.

Their food consists of serpents, lizards, frogs, small fish, &c., for which they watch with a keen eye, on the margins of lakes and pools, and in swamps and marshes. In low countries, abounding with places of this description, such as Holland, the Stork is a welcome visitant, and always meets with a friendly reception.

In its migrations, this bird avoids the extremes of heat and cold: in summer, it is never seen farther north than Sweden or Russia; and in winter, it is not known to venture further south than Egypt, where it is constantly seen during that season: in the intermediate countries, both in Asia and Europe, it is common in the temperate seasons of the year.

Before the Storks take their departure, they assemble in large flocks, and seem to confer on the plan of their route. Though very silent at other times, on this occasion they make a singular clattering noise with their bills, and all seems bustle and consultation. The first north wind is the signal for their departure, when the whole body become silent, and move at once, generally in the night.*

The Stork is now seldom seen in Britain: Wallis, in his History of Northumberland, mentions one which was killed near Chollerford Bridge, in the year 1766. Its skin was nailed up against the wall of the inn at that place, and drew crowds of people from the adjacent parts to view it. The foregoing figure was taken from a stuffed specimen in the Wycliffe Museum.

* "The Stork in the heavens knoweth her appointed times; and the Turtle, and the Crane, and the Swallow, observe the time of their coming."—*Jeremiah* viii. 7.

THE HERON.*

COMMON HERON, HERONSEWGH, OR HERONSHAW.

(*Ardea major*, Linn.—*Le Heron huppé*, Buff.)

Although the Heron is of a long, lank, awkward shape, yet its plumage gives it, on the whole, an agreeable appearance; but, when stripped of its feathers, it

* Some ornithologists have separated the Heron from the Cranes and the Storks, and, from the difference observable in the conformation of their parts, consider them as a distinct genus: others, preferring the Linnæan system, class the whole together, and thus make them amount to above eighty distinct species, besides varieties, widely distributed over various parts of the globe, all differing in their size, figure, and plumage, and with talents adapted to their various places of residence, or their peculiar pursuits. But, notwithstanding the difference in their bills, and the colours of their plumage, the manners of all are nearly the same.

looks as if it had been starved to death. It seldom weighs more than between three and four pounds, notwithstanding it measures about three feet in length, and in breadth, from tip to tip, above five. The bill is six inches long, straight, pointed, and strong, and its edges are thin, and slightly serrated; the upper mandible is of a yellowish horn colour, darkest on the ridge; the under one yellow. A bare greenish skin is extended from the beak beyond the eyes, the irides of which are yellow, and give them a fierce and piercing aspect. The brow and crown of the head are white, bordered above the eyes by black lines, which reach the nape of the neck, where they join a long flowing pendent crest, of the same colour. The upper part of the neck, in some, is white, in others, pale ash; the fore part, lower down, is spotted with a double row of black feathers, and those which fall over the breast are long, loose, and unwebbed; the shoulders and scapular feathers are of the same texture, of a grey colour, generally streaked with white, and spread over its down-cloathed back. The ridge of the wing is white, coverts and secondaries, lead grey; bastard wings and quills, bluish black; as are, also, the long soft feathers which take their rise on the sides, under the wings, and, falling down, meet at their tips, and hide all the under parts: the latter, next the skin, are covered with a thick, matted, dirty white down, except about the belly and vent, which are almost bare. The tail is short, and consists of twelve feathers, of a cinereous or brownish lead colour; the legs are dirty green, long, bare above the knees, and the middle claw is jagged on the inner edge.

The female has not the long flowing crest, or the long feathers which hang over the breast of the male, and her whole plumage is more uniformly dull and obscure. In the breeding season, they congregate in large societies, and, like the Rooks, build their nests on trees, with sticks, lined with dried grass, wool, and other warm materials. The female lays from four to six eggs, of a pale greenish blue colour.*

This bird is of a melancholy deportment, a silent and patient creature; in the most severe weather it will

* A remarkable circumstance, with respect to these birds, occurred not long ago, at Dallam Tower, in Westmoreland, the seat of the late Daniel Wilson, Esq.

"There were two groves adjoining to the Park: one of which, for many years, had been resorted to by a number of Herons, which there built and bred; the other was one of the largest rookeries in the country. The two tribes lived together for a long time without any disputes. At length, the trees occupied by the Herons, consisting of some very fine old oaks, were cut down in the spring of 1775, and the young brood perished by the fall of the timber. The parent birds immediately set about preparing new habitations, in order to breed again; but, as the trees in the neighbourhood of their old nests were only of a late growth, and not sufficiently high to secure them from the depredation of boys, they determined to effect a settlement in the rookery. The Rooks made an obstinate resistance; but, after a very violent contest, in the course of which many of the Rooks, and some of their antagonists, lost their lives, the Herons at last succeeded in their attempt, built their nests, and brought out their young.

"The next season, the same contests took place, which terminated, like the former, by the victory of the Herons. Since that time, peace seems to have been agreed upon between them: the Rooks have relinquished possession of that part of the grove which the Herons occupy; the Herons confine themselves to those trees they first seized upon, and the two species live together in as much harmony as they did before their quarrel."—*Heysham.*

stand motionless a long time in the water, with its head laid back between its shoulders, its bill overlapped by the long feathers of the neck, as a defence from the cold, and fixed to a spot, in appearance like the stump or root of a tree, waiting for its prey, which consists of eels and other kinds of fish, frogs, water-newts, &c.; it is also said to devour field-mice.

The Heron traverses the country to a great distance in quest of some convenient fishing spot, and in its aerial journies soars to a great height, to which the eye is directed by its harsh cry, uttered from time to time while on the wing. In flying, it draws the head between the shoulders, and the legs, stretched out, seem, like the longer tails of some birds, to serve as a rudder. The motion of their wings is heavy and flagging, and yet they get forward at a greater rate than would be imagined.

In England, Herons were formerly ranked among the royal game, and protected as such by the laws; and whoever destroyed their eggs, was liable to a penalty of twenty shillings for each offence. Heron-hawking was, at that time, a favourite diversion among the nobility and gentry of the kingdom, at whose tables this bird was a favourite dish, and was as much esteemed as Pheasants and Peacocks.

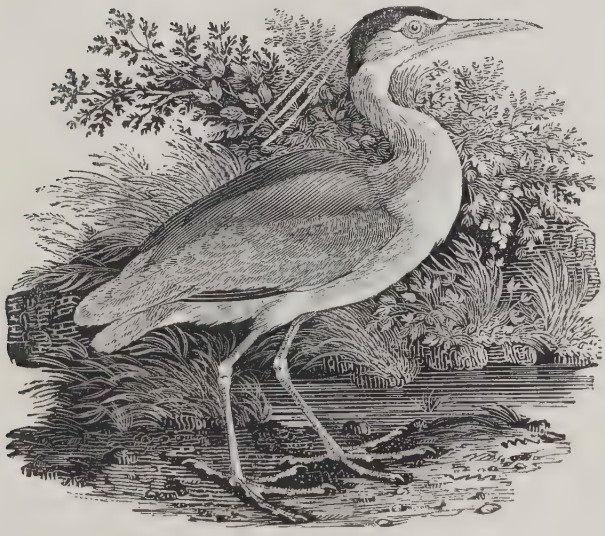
THE GREAT WHITE HERON.

(*Ardea alba*, Linn.—*Le Heron blanc*, Buff.)

The great white Heron is of nearly the same bulk as the common Heron, but its legs are longer. It has no crest, and the plumage is wholly white, the bill yellow, and legs black.

Its character and manner of living are the same as those of the common Heron, and it is found in the same countries, though the species is not nearly so numerous. It has rarely been seen in Great Britain. Pennant, in his Arctic Zoology, says, it is found in the Russian dominions, about the Caspian and Black Seas, the lakes of Great Tartary, and the river Irtisch, and sometimes as far north as latitude 53. Latham says, it is met with at New York, in America, from June to October; at different seasons of the year it is found in Jamaica, and in the Brazils: and our circumnavigators have met with it at New Zealand.

According to Temminck, this is the young of the Great Egret. (Ardea Egretta, *Linn.*)



THE NIGHT HERON.

LESSER ASH-COLOURED HERON, OR NIGHT RAVEN.

(*Ardea Nycticorax*, Linn.—*Le Bihoreau*, Buff.)

Length, about twenty inches. The bill is three inches and three quarters long, slightly arched, strong, and black, inclining to yellow at the base; the skin, from the beak round the eyes, is bare, and of a greenish colour; irides, yellow. A white line is extended from the beak over each eye; a black patch, glossed with green, covers the crown of the head, and the nape of the neck, from which three long narrow white feathers, tipped with brown, hang loose and waving: the hinder part of the neck, coverts of the wings, the sides, and tail, are ash grey; throat, white; fore part of the

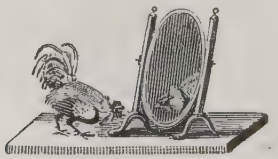
neck, breast, and belly, yellowish white or buff; the back black; legs, greenish yellow.

The female is nearly of the same size as the male, but she differs considerably in her plumage, which is less bright and distinct, being more blended with dirty white, brown, grey, and rusty ash; and she has not the delicate plumes which flow from the head of the male.

The Night Heron frequents the sea-shores, rivers, and inland marshes, and lives upon insects, slugs, reptiles, and fish. It remains concealed during the day, and does not roam abroad until the approach of night, when it is heard and known by its rough, harsh, and disagreeable cry, which is, by some, compared to the noise made by a person straining to vomit. They build on trees, and on rocky cliffs. The female lays three or four white eggs.

This species is not numerous, although widely dispersed over Europe, Asia, and America.

The above figure was taken from a stuffed specimen in the Wycliffe Museum, and is the only one the author has seen. The bird is, indeed, very uncommon in this country. Latham mentions one in the Leverian Museum, which was shot not many miles from London, in May, 1782.



THE PURPLE-CRESTED HERON

(*Ardea purpurea*, Linn.—*Le Heron pourpré hupé*, Brisson,)

Is rather less than the common Heron. Length, two feet ten inches and a half. The bill, from the tip to the brow, is about four inches and six-eighths; the upper mandible dusky, edged with yellow; the under one, the bare space, or lore, to the eyes, and the irides, are, also, yellow; the upper part of the head is glossy black, and crested, with the two middle feathers elongated about three and a half inches beyond the rest; the chin and throat are white; neck, rusty yellow and white; the sides of the head reddish yellow, divided from the corners of the mouth by a black line, which

is extended to the hinder part of the head, and continued down the neck; another black line nearly joins this, on the cheeks, and falls down on the side of the neck, where it inclines forward and meets those feathers, marked with lengthened black and white spots, which occupy the front of the neck; there, joining with those very long pendant ones, striped in the middle with black, and edged with white, that cover the lower part of the neck, they fall over the breast, and, ending in long loose white filaments, reach nearly to the thighs: the breast is of a bright rich deep reddish chesnut; thighs and ridge of the wing, pale chesnut and white: from the lower part of the breast, to the vent, is a stripe of black, somewhat broken, with others of bay and white; the under tail coverts are streaked with black and white; the upper plumage is ash, of deeper and lighter shades, and somewhat tinged with brown; the scapulars are terminated with long narrow feathers of a light rufous chesnut; the secondaries are of an ash-blue, and so long as to cover the tail, which is also of the same colour; the primaries are deep blue black; the legs appear dusky before, and are yellow behind, and above the knee the same: the toes are dusky and long, the nail of the middle ones serrated.

The bird from which our figure was made was lent to this work by the Rev. Keir Vaughan, rector of Aveton Gifford, Devon: it had not any purple in its plumage, and why ornithologists have named it as above, we are at a loss to know.

The author was favoured, by Jonathan Couch, Esq., F. L. S, of Polperro, Cornwall, with a coloured drawing of a bird, which is supposed to be of the same

species as the foregoing. Mr Couch says, "it alighted on a fishing-boat, two or three leagues from land, May 3rd, 1822, and was taken: when brought on shore, it soon died. The bill, to the eyes, measured five inches, straight, compressed, yellow, with longitudinal nostrils: on the head, a pendant crest formed of two long and slender feathers; a naked skin (lore) reaching to the eyes; the neck very long, and a singular provision is made for lengthening and contracting it; the cervical vertebræ pass for some distance in the usual manner; but, at nearly half way down the neck, seem as if broken, the vertebræ turning forward, so that the gullet and wind-pipe pass behind; which structure keeps them from being too much stretched when the neck is bent. Body very thin; legs long, yellow, except the fore part of the leg below the knee, and the toes; the first joint of the outer toes united, none of the toes serrated. When stretched out, from the bill to the toes, three feet eleven inches; spread of the wings, four feet five inches. Top of the head, black; body, a reddish brown; under the chin, white; the neck is brown; the breast, reddish brown; quill feathers of the wing, black; lesser coverts, brown; long slender feathers hanging from the upper part of the back." It has been judged proper to figure this bird, with the abrupt bend of the neck, as it appears in Mr Couch's drawing, which was taken while the bird was fresh and in full feather; and our figure, for this reason, has been somewhat more fully feathered than the stuffed specimen, which appeared to be much dried and shrivelled.

THE LITTLE EGRET.

(*Ardea Garzetta*, Linn.—*L'Aigrette*, Buff.)

The Egret is one of the smallest, as well as the most elegant of the Heron tribe: its shape is delicate, and the plumage white as snow; but what constitute its principal beauty, are the soft, silky, flowing plumes on the head, breast, and shoulders: they consist of single slender shafts, thinly set with pairs of fine soft threads, which float on the slightest breath of air. Those which arise from the shoulders, are extended over the back, and flow beyond the tail. These plumes were formerly used to decorate the helmets of warriors: they are now applied to a gentler and better purpose, in ornamenting the head-dresses of the European ladies, and the turbans of the Persians and Turks.

The Egret seldom exceeds a pound and a half in weight, and rarely a foot and a half in length. A bare green skin is extended from the beak to the eyes; the irides are pale yellow: the bill and legs, black. Like the common Heron, they perch and build on trees, and live on the same kinds of food.

This species is found in almost every temperate and warm climate, and must formerly have been plentiful in Great Britain, if it be the same bird as that mentioned by Leland, in the list or bill of fare prepared for the famous feast of Archbishop Nevil, in which one thousand of these birds were served up. No wonder the species has become nearly extinct in this country!

THE LITTLE WHITE HERON.

(*Ardea æquinoctialis*, Linn.—*La Garzette blanche*, Buff.)

This rare bird was first brought into notice, as a British bird, by Montagu. He says, it was shot on the southern-most promontory of Devonshire, very near the coast, between the Start and the Prawl.

Our figure, which was from a stuffed specimen, was much larger than the bird described by him, but being in a case, its measurements could not be taken. In size and appearance, it scarcely differs from the Little Egret, of which, indeed, it is now believed to be the young.

THE BUFF-COLOURED EGRET.

SQUACCO HERON.

(*Ardea comata*, Pallas.—*Le Guacco*, Buff.)

Length of the bill, from the tip to the brow, two and a half inches; both mandibles yellow, from the base to about the middle; thence to the point, black: lore greenish; irides yellow. The upper part of the head is marked with longish stripes of dusky and buff; on the rest of its flowing crest, the feathers are white in the middle, with black edges; about six of them are longer than the rest, the two middle ones reaching the back: the rest of the plumage is in different shades of rusty buff and white, but the back is deepest, and of a vinous cast. The legs, toes, and bare part of the thighs, are yellow; the former are shorter and stouter, and the

toes longer, than in other species of the stuffed specimens of the Egrets which we have examined. This appears to be a new species, or of another family of the Egrets.

This *rara Avis* on the British shores, was long since noticed by Willoughby and Ray; and a bird of this species was said to have been taken at Yarmouth in December, 1820. Latham describes the Squacco Heron as being about the size of a Crow; and, judging by Mr Vigors's preserved specimen, from which the foregoing figure was drawn, we think he was correct. We are not informed when or where the present subject was taken or shot.

THE FRECKLED HERON.

(*Ardea Lentiginosa*, Montagu.)

"LENGTH about twenty-three inches. Bill, rather slender, two inches and three quarters long to the feathers on the forehead, and both mandibles equally turned to form the point; head, very small; breast, belly, and sides, marked with large chocolate-coloured spots; back and scapulars, chocolate brown; tail, short; legs, three inches and three quarters in length from the heel to the knees; toes, long and slender, middle claw pectinated on the inner side: legs bare, an inch above the knee, and, with the toes, greenish."—*Montagu.*

Montagu's description, from which the above is taken, is very minute. He was the first to introduce it as a new British species, it having been shot in Dorsetshire, in 1804. Yet, after all, he suspects it to be a female; and, also, "that it may prove a sexual distinction of some species obscurely known."

THE BITTERN.

BOG-BUMPER, BITTER-BUM, OR MIRE-DRUM.

(*Ardea stellaris*, Linn.—*Le Butor*, Buff.)

The Bittern is nearly as large as the common Heron, but its legs are stronger; body, more plump and fleshy; and its neck is more thickly clothed with feathers. The beak is strong at the base, straight, sharp on the edges, and gradually tapers to an acute point; the upper mandible is brown, the under inclining to green; mouth wide, the gape extending beyond the eyes, with

a dusky patch at each angle: irides yellow. The crown of the head is somewhat depressed, and covered with long black feathers; throat yellowish white, sides of the neck pale rusty, variegated with black, in spotted, waved, and narrow transverse lines, and on the fore part the ground colour is whitish, and the feathers fall down in less broken and darker lengthened stripes. These neck feathers, which it can raise and depress at pleasure, are long and loose, and, inclining backward, cover the neck behind; those below them, on the breast, to the thighs, are streaked lengthwise with black, edged with yellowish white: the thighs, belly, and vent, are dull pale yellow, clouded with dingy brown. The plumage on the back and wings is marked with black zig-zag lines, bars, and streaks, upon a ground shaded with rufous and yellow. The bastard wings, greater coverts, and quills, are brown, barred with black. The tail, which consists of ten feathers, is very short: the legs are pale green, bare a little above the knees; the claws, particularly those on the hind toes, are long and sharp, the middle ones serrated.

The female is less than the male; her plumage is darker, and the feathers on the head, breast, and neck, are shorter, and the colours not so distinctly marked. She makes an artless nest, composed chiefly of the withered stalks and leaves of the high coarse herbage, in the midst of which it is placed, and lays from four to six eggs of a greenish white.

The Bittern is a shy solitary bird; it is never seen on the wing in the day-time; but sits, commonly with the head erect, hid among the reeds and rushes in the marshes, where it takes up its abode, and from whence

it will not stir, unless disturbed by the sportsman. When it changes its haunts, it removes in the dusk of the evening, and then, rising in a spiral direction, soars to a vast height. It flies in the same heavy manner as the Heron, and might be mistaken for that bird, were it not for the singularly resounding cry which it utters, from time to time, while on the wing; but this cry is feeble when compared to the hollow booming noise* which it makes during the night, in the breeding season, from its swampy retreats.

The Bittern, when attacked by the Buzzard, or other birds of prey, defends itself with great courage, and generally beats off such assailants; neither does it betray any symptoms of fear, when wounded by the sportsman, but eyes him with a keen undaunted look, and, when driven to extremity, will attack him with the utmost vigour, wounding his legs, or aiming at his eyes with its sharp and piercing bill. It was formerly held in much estimation at the tables of the great.

Like the Heron, it lives upon water animals, for which it patiently watches, unmoved, for hours together.

* "The Bittern booms along the sounding marsh,
Mixt with the cries of Heron and Mallard harsh."

THE LITTLE BITTERN.

(*Ardea minuta*, Linn.—*Le Blongios*, Buff.)

The body is about the size of a Thrush. The bill, from the tip to the brow, is, in length, one inch and seven-eighths, greenish yellow, dusky at the tip of the upper mandible, and the edges are jagged; the feathers on the top of the head are elongated behind; these, as well as the back and tail, are black, with greenish reflections, and the secondary and primary quills are nearly the same; the neck is long, the hinder part of it bare of feathers, but those from the fore part fall back and cover it; sides of the chin dull white; the cheeks incline to chesnut; the neck, lesser coverts of the wings, lower part of the breast, and the thighs,

are reddish buff; greater coverts white; the belly and vent yellowish dirty white; the feathers on the upper part of the breast are black, edged with pale buff, and are spread over part of the shoulders, breast, and wings; those below, which cover the breast to the thighs, are long and narrowly striped down the middle with pale brown; legs and toes dark green, and nearly of the same length as the bill.

This species is very rarely met with in this country. The above figure was taken from a stuffed specimen, obligingly lent to this work by Sir M. W. Ridley, Bart., of Blagdon, Northumberland: the bird was shot there on the 10th of May, 1810.

THE FEMALE LITTLE BITTERN.

This bird measures only about fifteen inches in length. From the corners of the mouth, a black stroke extends along the under sides of the cheeks; and a patch of black, glossed with green, and edged with chesnut, covers the crown of its head. On the back, rump, and scapulars, the feathers are dark brown, edged with pale rusty-coloured red; the sides of the neck, and the breast, are of the same colours, but the brown on the middle of each feather is in narrower streaks. The belly is white: the tail short, and of a black green colour, edged and tipped with tawney: the legs, dirty green.

The above drawing and description were taken from a specimen in the Wycliffe Museum.

Of the Spoonbill.

The bill is very broad, long, flat, and thin, the end widening into a roundish form not unlike a spoon; nostrils small, and placed near the base; tongue small, and pointed, and the feet semi-palmated.

Of this genus only three species are known, and these are thinly dispersed over various parts of the globe. Their common residence is on the sea-shores, or the contiguous fens and swamps which are occasionally overflowed by the tide, or on such low marshy coasts as are constantly covered with stagnant pools of water. These places they very seldom quit, but sometimes are seen by the sides of lakes or rivers in the interior parts of the country. They feed on various kinds of little fishes, and shell-fish, which they swallow whole; also on worms, insects, frogs, and the various other inhabitants of the slimy pools, through which they wade, and search the mud with their curiously constructed bills; and sometimes they eat the weeds, grasses, and roots which grow in those boggy places.

THE SPOONBILL.

WHITE SPOONBILL.

(*Platalea Leucorodia*, Linn.—*Le Spatule*, Buff.)

The Spoonbill measures two feet eight inches in length. The whole plumage is white, though some few have been noticed with the quills tipped with black.

The bill, which flaps together not unlike two pieces of leather, is the most striking feature in this bird: it is six inches and a half long, broad and thick at the base, and very flat towards the extremity, where, in

shape, it is widened and rounded like a spatula: it is rimmed on the edges with black, and terminated with a small downward-bent point or nib. The colour of the bill varies in different birds; in some, the little ridges which wave across the upper bill are spotted, in others striped with black or brown, and generally the ground colour of both mandibles is in different shades of deeper or lighter yellow: the insides, towards the gape of the mouth, near the edges, are studded with small hard tubercles, or furrowed prominences, and are also rough near the extremities of the bill, which enables them to hold their slippery prey. A black bare skin extends from the bill round the eyes, the irides of which are grey; the skin which covers the gullet is also black and bare, and is capable of great distention. The feathers on the hinder part of the head are long and narrow, and form a sort of tuft or crest which falls behind. The toes are connected near their junction by webs, which reach the second joint of the outer toe, and the first of the inner ones, and slightly border them on each side to their extremities: the feet, legs, and bare part of the thighs, are covered with a hard and scaly skin of a dirty black.

The White Spoonbill migrates northward in the summer, and returns south on the approach of winter, and is met with in all the intermediate low countries, between the Ferro Isles and the Cape of Good Hope. They were formerly numerous on the marshes of Sevenhuys, near Leyden, in Holland. In England, they are rare visitants: Pennant mentions that a flock of them migrated into the marshes near Yarmouth, in April, 1774.

Like the Rooks and the Herons, they build their nests on the tops of large trees, lay three or four eggs, the size of those of a Hen, white, sprinkled with pale red, and are very noisy during the breeding season. The intestines are described as being very long, and the *trachea arteria* like that of the Crane, and making a double inflection in the thorax.

Of the Ibis.

In this genus of birds, which is new to our work, the bill is long, thick at the base, deflected, point depressed, rounded, and obtuse; face, and sometimes the whole head, naked; nostrils linear; tongue short; toes connected at the base by a membrane.

They moult once a year. The sexes do not differ, except in the smaller size of the female. The plumage of the young birds is in many respects different from that of the adult.

Temminck regards as fabulous, the reputation which these birds have obtained of being great destroyers of serpents and venomous reptiles; animals which they are never known to touch.

Two species of the Ibis were held in such veneration by the ancient Egyptians, as to have been worshipped and embalmed; numerous mummies of them being found in the great sepulchres of Memphis and other cities.

THE IBIS.

GLOSSY IBIS.

(*Tantalus Igneus*, Linn.—*Le Courlis Vert*, Buff.)

The stuffed specimen, from which our figure was taken, was obligingly lent to this work by P. J. Selby, Esq., of Twizell House; it was a male bird, shot on the banks of the Coquet, near Rothbury, in the autumn of 1820, and appears to be in the changing state of plumage, described by Montagu, as approaching the Glossy Ibis. He says, the weight of a fresh specimen of this kind, in his possession, was about eighteen ounces; length twenty-two inches; breadth two feet nine inches. Latham thus describes the Bay Ibis:—

"Bill nearly four inches long, and brown; from the bill to the eye bare, and dusky green; the head and neck are chesnut, verging to brown on the former, where the feathers have pale edges; the upper parts of the body are glossy green, appearing bronzed in different lights; the breast, belly, and under parts are brown, with a gloss of green gold on the breast; quills and tail darker than the back, and with very little gloss; legs dusky blue: between each toe a small membrane at the base." The bills of these birds, like those of the Curlews and Godwits, vary in length. Our specimen measured from the tip to the feathers of the brow four inches and three quarters; from the tread of the foot to the knee is about the same length: their legs are long, and bare above the knees; their toes are also long, and the hinder one so placed as to bear its whole length upon the ground.

The Green Ibis (Tantalus viridis), and the Bay Ibis (Tantalus Falcinellus), are now understood to be the present bird in different stages of its progress to maturity. The female differs in nothing but her smaller bulk.

They frequent the borders of rivers and lakes, and feed upon insects, worms, fresh water shell-fish, vegetable matters, &c. They breed in Asia, but their place and mode of nidification are not known.

They are regularly migratory in Egypt, and are met with in most of the central and southern parts of Europe. Temminck says he shot, in 1812, two adult males on the sea shore in Holland, which differed in no respect from those sent to him from Egypt, and which had been shot during the French campaigns in that country.

Of the Curlew.

The bill is long, equally incurvated, and terminated in a blunt point; nostrils linear, and longitudinal near the base; tongue short and sharp-pointed; toes connected, as far as the first joint, by a membrane.

With the Curlew, Linnæus begins a numerous tribe of birds, under the generic name of *Scolopax*, which includes even all the Snipes and Godwits, amounting to forty-two species and eight varieties, spread over various parts of the world, but no where very numerous.

Only two or three of the Curlews are British birds. They inhabit the vicinity of waters and marshes, and feed upon worms, which they pick up on the surface, or, with their bills, dig from the soft earth: on these they depend for their principal support; but they also devour the various kinds of insects which swarm in the mud of the wet boggy grounds, which these birds chiefly frequent. They migrate in flocks, but live in pairs during the period of incubation; they moult once a year; the young differ little from the old birds, except in the slighter curvature and the shortness of the bill. The sexes do not differ.

THE CURLEW.

(*Scolopax Arquata*, Linn.—*Le Courlis*, Buff.)

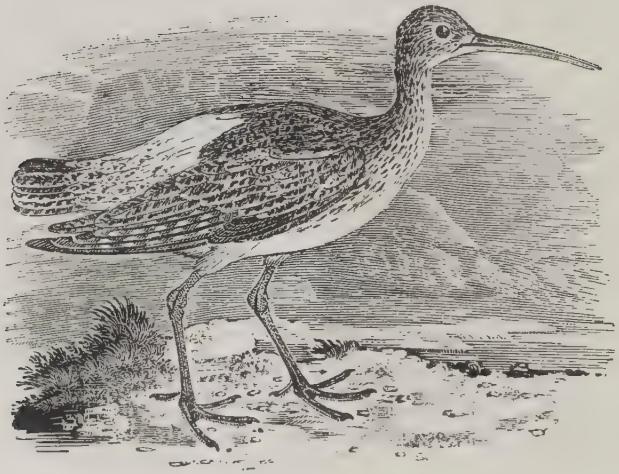
The Curlew generally measures about two feet in length, and, from tip to tip, above three feet. The bill is about seven inches long, of a regular curve, and tender substance at the point, which is blunt. The upper mandible is black, gradually softening into brown towards the base; the under one flesh-coloured. The head and neck are streaked with darkish and light brown; wing coverts the same; the feathers of the back and scapulars are nearly black in the middle, edged and deeply indented with pale rust or light grey. The breast, belly, and lower part of the back are dull white, the latter thinly spotted with black, the two

former with oblong strokes more thickly set, of the same colour. The quill feathers are black, the inner webs crossed or spotted with white: tail barred with black, on a white ground, tinged with red: thighs bare about half way above the knees, of a bluish colour: the toes are thick, and flat on the under side, being furnished with membraneous edgings on each side to the claws.

These birds differ much in size, as well as in the different shades of their plumage, some of them weighing not more than twenty-two ounces, and others as much as thirty-seven. In the plumage of some, the white parts are, most probably from age or sex, more distinct and clear than in others, which are more uniformly grey, and tinged with pale brown.

The female is so nearly like the male, that any particular description of her is unnecessary: she makes her nest upon the ground, in a dry tuft of rushes or grass, of such withered materials as are found near, and lays four eggs of a greenish cast, spotted with brown.

The Curlew is met with in most parts of Europe, from Iceland to the Mediterranean Islands. In Britain, their summer residence is upon the large, heathy, and boggy moors, where they breed. Their food consists of worms, flies, and insects, which they pick out of the soft mossy ground, by the marshy pools which are common in such places. In autumn and winter they depart to the sea-side, in great numbers, and there live upon worms, marine insects, and other fishy substances, which they pick up on the beach, and among the loose rocks and pools left by the retiring tide.



THE WHIMBREL.

(*Scolopax Phœopus*, Linn.—*Le petit Courlis*, Buff.)

The Whimbrel is not much more than half the size of the Curlew, which it very nearly resembles in shape, colour of its plumage, and manner of living. It is about seventeen inches in length, twenty-nine in breadth, and weighs about fourteen ounces. The bill is about three inches long, the upper mandible black, the under one pale red. The top of the head is black, divided in the middle of the crown by a white line from the brow to the hinder part: between the bill and the eyes is a darkish oblong spot: the sides of the head, the neck, and breast, are pale brown, marked with narrow dark streaks, pointing downwards: belly the same, but the dark streaks upon it are larger;

about the vent it is quite white: the lower part of the back is also white. The rump, and tail feathers, are barred with black and white; shafts of the quills white, the outer webs black, but the inner ones marked with large white spots: the secondary quills are spotted in the same manner on both the inner and outer webs. The legs and feet are of the same shape and colour as those of the Curlew.

It is not so commonly seen on the sea-shores of this country as the Curlew; it is also more retired and wild, ascending to the highest mountain heaths in spring and summer to breed.

The yearlings have the bill scarcely an inch and a half long: it becomes more and more curved as the bird increases in size. In the mature state it measures three inches, and sometimes more. They are met with in almost every country of Europe, Asia, and America, but breed chiefly in northern regions.

THE PIGMY CURLEW.

(*Scolopax Pygmæa*, Linn.—*Le plus petit des Courlis*, Buff.)

This doubtful species has been hitherto described under the name of the "Pigmy Curlew," but was removed from the place it held amongst the Curlews by that indefatigable ornithologist, Montagu, who placed it amongst the Sandpipers. The bill is black, slender, and slightly curved downwards: it is grooved on both mandibles, and measures two inches and one-eighth from the tip to the brow; the feathers on the crown of the head and nape are deep brown, with rusty tips and edges: a whitish streak, faintly spotted, passes from the bill over each eye, and a brown one extends in the same way underneath them; the throat is dull white, the breast is plain reddish buff; the fore part and sides

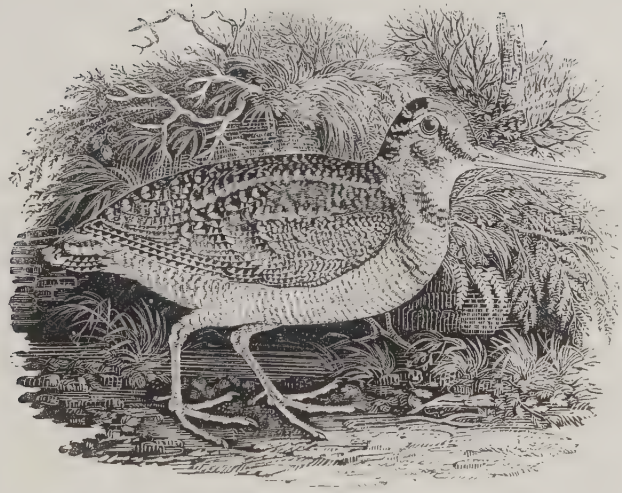
of the neck are of the same colour, but streaked with brown; the hinder part of the neck is darker, and streaked with ash-coloured brown; the upper parts of the plumage partake more or less of a glossy bronze olive brown, and most of the feathers are darkest near their margins, and edged and tipped with pale rusty white; the tertials are also edged and tipped with the same; the greater coverts are ash-brown, with white edges and tips; the secondary quills are brown, edged with white on their outer webs; the inner ones are mostly white; the tail, which consists of twelve feathers, is brownish ash, edged and tipped with dull white; the belly, and upper and under coverts of the tail, are more or less of a pure white; the legs and toes are slender, of a dark colour, and bare of feathers about half an inch above the knees, and from these an inch and a quarter long to the tread of the foot. Montagu's description is somewhat different from the above; but whether this may arise from age or sex, we cannot determine. The stuffed specimen from which the foregoing figure and description were taken, was presented to the author, by Mr Bullock, in the latter end of January, 1814; it was shot near Sunderland, among many other birds which had been driven from their northern haunts by the extremity of the weather, during the very stormy winter of that year.

Of the Snipe.

The bill is long, straight, narrow, flexible, and rather blunt at the tip; eyes large, and placed far back; nostrils linear, and lodged in a furrow; tongue pointed, and slender; toes divided, or very slightly connected, the back toe very small. Birds of this tribe moult twice a year.

This family of the genus *Scolopax* amounts, according to Latham, to about twenty species, of which only the Woodcock, Common Snipe, and Judcock, are by him accounted British Birds.

Pennant has placed the Woodcock after the Curlews, as the head of the Godwits and Snipes; and others are of opinion that the Knot, from the similarity of its figure to that of the Woodcock, ought to be classed in this tribe. In these subdivisions, ornithologists may vary their classifications without end. As in a chain doubly suspended, the rings of which gradually diminish towards the middle, the leading features of some particular bird may point it out as the head to a tribe; others, from similarity of shape, plumage, or habits, will form, by almost imperceptible variations, the connecting links; and from those which may be said to compose the curvature of the bottom, by gradations equally minute, the varieties will rise to the last ring of the other end, which, as the head of another tribe, will be marked with characters very different from the first.



THE WOODCOCK.

(*Scolopax Rusticola*, Linn.—*La Bécasse*, Buff.)

The Woodcock measures fourteen inches in length, twenty-six in breadth, and weighs about twelve ounces. The shape of the head is remarkable, being rather obtusely triangular than round, with the eyes placed near the top, and the ears very forward, nearly on a line with the corners of the mouth. The upper mandible, which measures about three inches, is furrowed nearly its whole length, and at the tip it projects beyond, and hangs over, the under one, ending in a kind of knob, which, like those of others of the same genus, is susceptible of the finest feeling, and calculated, by that means, (aided, perhaps, by an acute smell,) to find the small worms in the soft moist grounds, from whence it

extracts them with its sharp-pointed tongue. With the bill it also turns over and tosses the fallen leaves in search of insects which shelter underneath. The crown of the head is ash colour; the nape, and back part of the neck, are black, marked with three bars of rusty red: a black line extends from the corners of the mouth to the eyes, the orbits of which are pale buff; the whole under parts are yellowish white, numerously barred with dark waved lines. The tail consists of twelve feathers, which, like the quills, are black, and indented across with reddish spots on the edges: the tip is ash above, and glossy white below. The legs are short, feathered to the knees, and in some are bluish, in others, sallow flesh colour. The upper parts of the plumage are so marbled, spotted, barred, streaked, and variegated, that to describe them with accuracy would be difficult and tedious. The colours, consisting of black, white, grey, red, brown, rufous, and yellow, are so disposed in rows, crossed and broken at intervals by lines and marks of different shapes, that the whole seem to the eye, at a little distance, blended together and confused, which makes the bird appear exactly like the withered stalks and leaves of ferns, sticks, moss, and grasses, which form the back ground of the scenery by which it is sheltered, in its moist and solitary retreats. The sportsman only, by being accustomed to it, is enabled to discover it, and his leading marks are its full dark eye, and glossy silver-white tipped tail. The female differs very little from the male, except in being a little larger, and less brilliant in her colours.*

* The flesh of this bird is held in very high estimation, and hence it is eagerly sought after by the sportsman. It is hardly necessary

The Woodcock is migratory, and, in different seasons, is said to inhabit every climate: it leaves the countries bordering upon the Baltic in the autumn and setting in of winter, on its route to this country. They do not come in large flocks, but keep dropping in upon our shores singly, or sometimes in pairs, from the beginning of October till December. They must have the instinctive precaution of landing only in the night, or in dark misty weather, for they are never seen to arrive; but are frequently discovered the next morning in any ditch which affords shelter, and particularly after the extraordinary fatigue occasioned by the adverse gales which they often have to encounter in their aerial voyage. They do not remain near the shores to take their rest longer than a day, but commonly find themselves sufficiently recruited in that time to proceed inland, to the very same haunts which they left the preceding season.* In temperate weather, they retire to the mossy moors, and bleak mountainous parts of the country; but as soon as the frost sets in, and the snow begins to fall, they return to lower and warmer situations, where they meet with boggy grounds and

to notice that, in cooking it, the entrails are not drawn, but roasted within the bird, whence they drop out with the gravy upon slices of toasted bread, and are relished as a delicious kind of sauce.

* In the winter of 1797, the gamekeeper of E. M. Pleydell, Esq., of Whatcombe, in Dorsetshire, brought him a Woodcock, which he had caught in a net set for rabbits, alive and unhurt. Mr P. scratched the date upon a bit of thin brass, and bent it round the Woodcock's leg, and let it fly. In December, the next year, Mr Pleydell shot this bird with the brass about its leg, in the very same wood where it had been first caught by the gamekeeper.

(Communicated by Sir John Trevelyan, Bart.)

springs, and little oozing mossy rills which are rarely frozen, and seek the shelter of close bushes of holly, furze, and brakes in the woody glens, or hollow dells which are covered with underwood: there they remain concealed during the day, and remove to different haunts and feed only in the night. From the beginning of March to the end, or sometimes to the middle of April, they draw towards the coasts, and avail themselves of the first fair wind to return to their native woods: should it happen to continue long to blow adversely, they are thereby detained; and, as their numbers increase, they are more easily found and destroyed by the merciless sportsman.

The female makes her nest on the ground, generally at the root or stump of a decayed tree; it is carelessly formed of dried fibres and leaves, upon which she lays four or five eggs, larger than those of a Pigeon, of a rusty grey, blotched and marked with dusky spots. The young leave the nest as soon as they are freed from the shell, but the parents continue to attend and assist them until they can provide for themselves. Buffon says, they sometimes take a weak one under their throat, and convey it more than a thousand paces.*

* Latham mentions three varieties of British Woodcocks: in the first, the head is of a pale red, body white, and the wings brown; the second is of a dun, or rather cream colour; and the third of a pure white. Dr. Heysham, in his Catalogue of Cumberland Animals, mentions his having met with one, the general colour of which was a fine pale ash, with frequent bars of a very delicate rufous: tail brown, tipped with white; and the bill and legs flesh colour. In addition to these, some other varieties are taken notice of by the late Marmaduke Tunstall, Esq., of Wycliffe, in his interleaved books of ornithology.

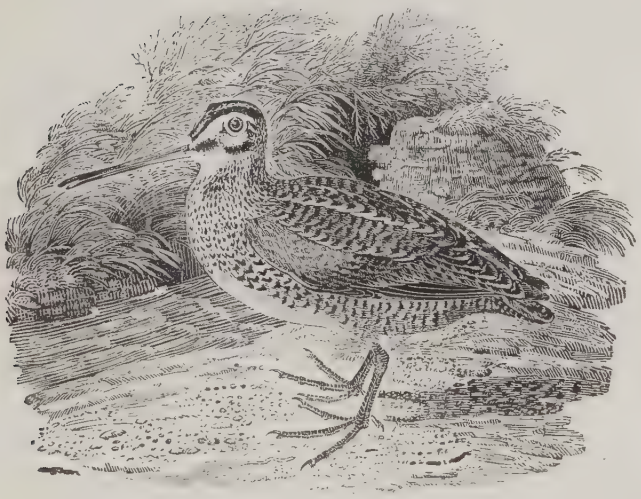
Latham and Pennant assert, that some Woodcocks deviate from the course which nature seems to have taught their species, by remaining throughout the year, and breeding in this country; and this assertion Mr Tunstall corroborates by such a number of well-authenticated instances, that the fact is unquestionable.*

A white Woodcock was seen three successive winters in Penrice wood, near Penrice Castle, in Glamorganshire: it was repeatedly flushed and shot at during that time, in the very same place where it was first discovered: at last it was found dead, with several others, which had perished by the severity of the weather, in the winter of 1793. This account, which was communicated to the author by Sir John Trevelyan, Bart., on the authority of the Rev. Dr. Hunt, proves not only the existence of white Woodcocks, but also the truth of the assertion, that the haunts of this bird are the same year after year.

* To describe the various methods which are practised by fowlers to catch this bird, would be tedious; but it may not be improper to notice those most commonly in use, and against which it does not seem to be equally on its guard as against the gun. It is easily caught in nets, traps, and springes, which are placed in its accustomed runs or paths, as its suspicions are all lulled into security by the silence of the night; and it will not fly or leap over any obstacles which are placed in its way, while in quest of its food; therefore, in those places, barriers and avenues formed of sticks, stones, &c., are constructed so as to *weir* it into the fatal openings, where it is entrapped: in like manner, a low fence, made of the tops of broom, stuck into the ground, across the wet furrow of a field, or a runner from a spring which is not frozen, is sufficient to stay its progress, and to make it seek, from side to side, for an opening, through which it might pass; and there it seldom escapes the noose that is set to secure it.

At the root of the first quill, in each wing, is a small pointed narrow feather, very elastic, and much sought after by painters, by whom it is used as a pencil. A feather of a similar kind is found in the whole of this tribe, and also in every one of the Tringas and Plovers which the author has examined.

When the Woodcock is pursued by the sportsman, its flight is very rapid, but short, as it drops behind the first suitable sheltering coppice, with great suddenness, and, in order to elude discovery, runs swiftly off, in quest of some place where it may hide itself in greater security.



THE SOLITARY SNIPE.

(Scolopax major.)

Latham gives the following description of this bird: "weight eight ounces: length sixteen inches: bill four inches long: crown of the head black, divided down the middle by a pale stripe: over and beneath each eye another of the same: cheeks and throat delicately and thinly sprinkled with small spots: the upper parts of the body very like the Common Snipe: beneath white: the feathers edged with dusky black on the neck, breast, and sides; and those of the belly spotted with the same, but the middle of it is plain white: quills dusky: tail reddish, the two middle feathers plain, the others barred with black: legs black. A fine speci-

men of this scarce bird was shot in Lancashire, now in the British Museum; said also to have been met with in Kent."

The author has seen three specimens of a large kind of Snipe, called by some sportsmen, from being always found alone, the *Solitary Snipe*. They weighed the same as the above-mentioned, but differed in some slight particulars, measuring only twelve inches in length, and, from tip to tip, about nineteen. The upper parts of the plumage were nearly like those of the Common Snipe: the breast, sides, belly, and vent, white, spotted, barred, and undulated with black. It is not clearly ascertained whether this be a distinct species of Snipe, or whether it acquires its bulk and change of plumage from age, and its solitary habits from ceasing to breed. As no new light has been thrown on the subject, it must still be considered a doubtful species; and if it has ceased to breed, nothing can be known from its nest or eggs.

The birds above-named (furnished by the late Major Gibson) were newly shot, and of course exhibited a more perfect shape and beautiful plumage than can be expected from a stuffed specimen. From them the outline has been held in remembrance, and a preserved specimen obligingly lent to this work by Mr Yarrell, has enabled us to fill up the markings of the plumage.

SCOLOPAX SABINI.

The bill, from the tip to the brow, is about two inches and five-eighths long: the whole plumage is composed of black, brown, and ferruginous; each feather tipped, edged, spotted, and crossed with the latter colour, which predominates on the cheeks, neck, and upper parts of the breast: on the sides of the head, the feathers are also very slightly fringed in small dots of that colour: the ears are nearly on a line with the corners of the mouth: in this respect, as well as in the general contour of its figure, it bears a resemblance to the Woodcock, but its bill is much longer in proportion to the size of the bird. It is feathered nearly to the knees; the legs short, toes long, and without any connecting web or membrane between them: they appear to be of a dusky or dark green colour. The author was favoured by N. A. Vigors, Esq., with a preserved specimen, from which the above figure is taken. The

bird was shot near Old Glass, Queen's County, Ireland, on the 21st of August, 1822.

A female of this species was shot on the banks of the Medway, near Rochester, on the 26th of October, 1824, exactly resembling this specimen, except in being somewhat smaller.

THE SNIPE.

SNITE, OR HEATHER-BLEATER.

(*Scolopax Gallinago*, Linn.—*La Bécassine*, Buff.)

The Snipe is generally about four ounces in weight, twelve inches in length, and fourteen in breadth. The bill is nearly three inches long; in some pale brown, in others greenish yellow, rather flat and dark at the tip, and very smooth in the living bird; but it soon becomes dimpled like the end of a thimble, after the bird is dead: the head is divided lengthwise by three reddish or rusty white lines, and two of black; one of the former passes along the middle of the crown, and one above each eye: a darkish mark is extended from the corners of the mouth nearly to each eye, and the auriculars form spots of the same colour: the chin and fore part of the neck are yellowish white, the former

plain, the latter spotted with brown. The scapulars are elegantly striped lengthwise on one web, and barred on the other, with black and yellow: quills dusky, the edge of the primaries, and tips of the secondaries, white; those next to the back barred with black, and pale rufous: the breast and belly are white: the tail coverts are reddish brown, and so long as to cover the greater part of it; the tail consists of fourteen feathers, the webs of which, as far as they are concealed by the coverts, are dusky, thence downward, tawny or rusty orange, and irregularly marked or crossed with black. The tip is commonly of a pale reddish yellow, but in some specimens nearly white: the legs are pale green.*

The common residence of the Snipe is in small bogs or wet grounds, where it is almost constantly digging and nibbling in the soft mud, in search of its food, which consists chiefly of a very small red transparent worm, about half an inch long; it is said also to eat slugs, insects, and grubs, which breed in great abundance in those slimy stagnant places. In these retreats, when undisturbed, the Snipe walks leisurely, with its head erect, and, at short intervals, keeps moving the tail. But in this state of tranquillity it is very rarely to be seen, as it is extremely watchful, and perceives the sportsman or his dog at a great distance, and instantly conceals itself among the variegated withered herbage,

* Mr Tunstall mentions a "very curious pied Snipe, which was shot in Botley Meadow, near Oxford, September 8, 1789, by a Mr Court: its throat, breast, back, and wings, were beautifully covered or streaked with white, and on its forehead was a star of the natural colour; it had also a ring round the neck and the tail, with the tips of the wings of the same colour."

so similar in appearance to its own plumage, that it is almost impossible to discover it while squatted motionless in its seat: it seldom, however, waits the near approach of any person, particularly in open weather, but commonly springs, and takes flight at a distance beyond the reach of the gun. When first disturbed, it utters a kind of feeble whistle, and generally flies against the wind, turning nimbly in a zigzag direction for two or three hundred paces, and sometimes soaring almost out of sight; its note is then something like the bleating of a goat, but this is changed to a singular humming or drumming noise, uttered in its descent.

From its vigilance and manner of flying, it is one of the most difficult birds to shoot. Some sportsmen can imitate their cries, and by that means draw them within reach of their shot; others prefer the more certain method of catching them in the night by a springe like that which is used for the Woodcock.

The Snipe is migratory, and is met with in all countries: like the Woodcock, it shuns the extremes of heat and cold, by keeping upon the bleak moors in summer, and seeking the shelter of the valleys in winter. In severe frosts and storms of snow, driven by the extremity of the weather, they seek the unfrozen boggy places, runners from springs, or any open streamlet of water, and they are sure to be found, often in considerable numbers, in these places, where they sometimes sit till nearly trodden upon before they will take flight.

Although it is well known that numbers of Snipes leave Great Britain in the spring, and return in the autumn, yet it is equally well ascertained, that many

constantly remain and breed in various parts of the country, for their nest and young ones have been so often found as to leave no doubt of this fact. The female makes her nest in the most retired and inaccessible part of the morass, generally under the stump of an alder or willow: it is composed of withered grasses and a few feathers: her eggs, four or five in number, are of an oblong shape, and greenish, with rusty spots. The young ones run off soon after they are freed from the shell, but they are attended by the parents until their bills have acquired a sufficient firmness to enable them to provide for themselves.*

* The Snipe is a very fat bird, but its fat does not cloy, and very rarely disagrees even with the weakest stomach. It is much esteemed as a delicious and well-flavoured dish, and is cooked in the same manner as the Woodcock.

THE JUDCOCK.

JACK-SNIPE, GID, OR JETCOCK.

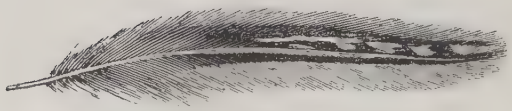
(*Scolopax Gallinula*, Linn.—*La petite Bécassine*, Buff.)

The Judcock, in its figure and plumage, nearly resembles the Snipe; but it is only about half its weight, seldom exceeding two ounces, or measuring more in length than eight inches and a half. The bill is black at the tip, and light towards the base, and rather more than an inch and a half in length. A black streak divides the head lengthwise, from the base of the bill to the nape of the neck; and another, of a yellowish colour, passes over each eye to the hinder part of the head: in the midst of this, above the eye, is a narrow black stripe, running parallel with the top of the head, from the crown to the nape. The neck is white, spotted with brown and pale red. The scapulars and tertials

are very long and beautiful; on their exterior edges they are bordered with a stripe of yellow, and the inner webs are streaked and marked with bright rust on a deep brown, or rather bronze, ground, reflecting, in different lights, a shining purple or green. The quills are dusky. The rump is glossy violet, or bluish purple; the belly and vent white. The tail consists of twelve pointed feathers of a dark brown, edged with rust colour: the legs are of a dirty or dull green.

The Judcock is of nearly the same character as the Snipe; it feeds upon the same kinds of food, lives and breeds in the same swamps and marshes, and conceals itself from the sportsman with as great circumspection, among the rushes or tufts of coarse grass. It, however, differs in this particular, that it seldom rises from its lurking place until it is almost trampled upon, and, when flushed, does not fly to so great a distance. It is as much esteemed as the Snipe, and is cooked in the same manner.

The legs are not larger than those of a Lark; in other respects they are very like those of the Snipe.



THE RED-BREASTED SNIPE.

(*Scolopax noveboracensis*,* Gm. Linn.)

Montagu says, "the weight of this species is seven ounces and three quarters; length fifteen inches; bill three inches long, a little reflected, and of a dusky colour, except at the base of the under mandible, which is pale; irides dusky; orbits white; crown of the head dusky, streaked with ferruginous; sides of the head, chin, throat, fore part of the neck, breast, belly, and sides bright bay, palest on the chin, and with a few solitary white feathers on the belly; round the vent and under tail coverts the feathers are white, tipped with bay; upper part of the neck behind ferruginous, slightly marked down the shafts with dusky; lower part of the hind neck, upper part of the back and scapulars dusky, spotted with ferruginous on the margin of the feathers; lower part of the back and rump white, with oblong dusky spots down the shafts: upper tail coverts barred dusky and ferruginous, becoming white at the base of the feathers; prime quills dusky black, the first six mottled with brown and white on the inner webs, towards the base; the secondaries cinereous, margined and spotted with white; the shafts of all more or less white; greater coverts of the prime quills black; from the fifth tipped with white; those on the secondaries cinereous, the inner webs spotted with white; lesser coverts a mixture of dusky, cinereous, and white,

* Temminck identifies this as the Brown Snipe (Scolopax Grisea) in the summer plumage.

dashed with ferruginous, with a few feathers near the quills spotted ferruginous like the back: under wing coverts white, elegantly barred and spotted with white; tail nearly even at the end, the two middle feathers rather the longest, the whole marked with eight or nine alternate bars of black and white quite to the base, forming, when the tail is spread, so many concentric semi-circular bands; legs dusky black, two and a half inches long from the knee to the heel; bare space above the knee, scarcely three quarters of an inch; toes marginated, outer one connected as far as the first joint to the middle one. This bird was shot at Knightsbridge, 1803, and proved to be a female." There is scarcely any difference between the male and the female.

Of the Godwit.

Latham enumerates eight species of this division of the genus Scolopax, of different sorts, all British. They are a timid, shy, and solitary tribe; their mode of subsistence constrains them to spend their lives amidst the fens, salt marshes, and deep muddy places near the mouths of rivers. They seldom remain above a day or two in the same place; often removing suddenly in a flock by night; and when there is moonlight, they may be seen and heard passing at a vast height. Their bills are long and slender, more or less bent upwards, smooth and blunt at the tip: their legs are long, and naked far above the knee. When pursued, they run with great speed, spring at a great distance, and scream as they rise. Their voice has been compared to the smothered bleating of a goat. Their food consists of worms, and larvæ; and their flesh is delicate and excellent. The moult, which occurs twice a year, changes almost entirely the colour of the plumage; one remarkable circumstance attending it is, that the females moult more slowly than the males; often when the latter have assumed the garb of the season, the females may be seen in the livery, either complete or partial, of the past season. The females are distinguished by their colours being less lively and distinct, and their size being greater than that of the male. The young differ little from the old birds in winter.

THE GODWIT.

COMMON GODWIT, GODWYN, YARWHELP, OR YARWIP.

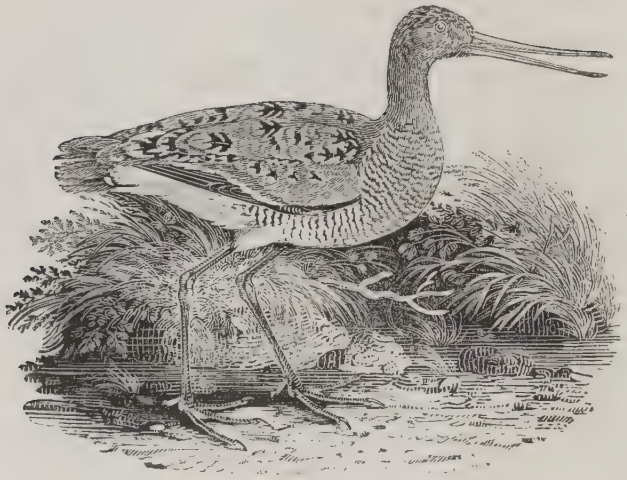
(*Scolopax Ægocephala*, Linn.—*La Grande Barge grise*, Buff.)

The weight of this bird is about twelve ounces; length about sixteen inches. Bill four inches long, and bent a little upwards, black at the point, gradually softening into a pale purple towards the base; a whitish streak passes from the bill over each eye: the head, neck, back, scapulars, and coverts, are dingy reddish pale brown, each feather marked down the middle with a dark spot. The fore part of the breast is streaked with black; belly, vent, and tail white, the latter regularly barred with black: the webs of the first six quill

feathers black, edged on the interior sides with reddish brown: legs in general dark coloured, inclining to greenish blue.

The Godwit is met with in various parts of Europe, Asia, and America: in Great Britain, in the spring and summer, it resides in the fens and marshes, where it rears its young, and feeds upon small worms and insects. During these seasons it removes only from one marsh to another; but when the winter sets in with severity, it seeks the salt marshes and sea-shores.*

* The Godwit is much esteemed, by epicures, as a great delicacy, and sells very high. It is caught in nets, to which it is allured by a *stale*, or stuffed bird, in the same manner, and in the same season, as the Ruffs and Reeves.



THE RED GODWIT.

RED-BREASTED GODWIT.

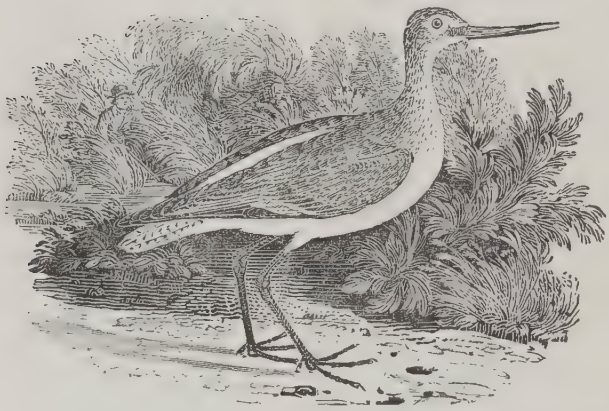
(*Scolopax lapponica*, Linn.—*La Barge Rousse*, Buff.)

This bird exceeds the Common Godwit in size, and is distinguished from it by the redness of its plumage; in other respects its general appearance and manner of living are nearly the same. It measures eighteen inches in length, and weighs about twelve ounces. The bill is nearly four inches long, slightly turned upwards, dark at the tip, and dull yellowish red towards the base. The predominant colour of the head, upper part of the shoulders, breast, and sides, is bright ferruginous or rusty red, streaked on the head with brown, and on the breast and sides barred or marbled with

dusky, cinereous, and white; neck plain dull rusty red. The back, scapulars, greater and lesser coverts are greyish brown; on the former, some of the feathers are barred and streaked with black and rufous, and edged with pale reddish white. The rump is white; the middle of the belly, and the vent, the same, slightly spotted with brown: a bar of white is formed across each wing by the tips of the greater coverts. The exterior webs, and tips of the primary quills are dark brown, and the interior webs white towards their base. In some specimens the tail is barred with black, or dark brown, upon a pale rufous ground; in others it is plain dark brown, with light tips and edges. The legs are dusky, and bare a long space above the knees.

Pennant, in his Arctic Zoology, says, "these birds are found in the north of Europe, and about the Caspian Sea, but never in Siberia, or any part of Northern Asia." According to Latham, they are plentiful in the fens about Hudson's Bay, in America. They are not very common in Great Britain. It is praised by those who have eaten it, as a very well-tasted and delicious bird.

The foregoing figure and description were taken from a bird in full plumage, sent to the author by the late Rev. J. Davies, senior fellow of Trinity College, Cambridge, to whom he is indebted for most of the fen birds.



THE CINEREOUS GODWIT.

(*Scolopax canescens*, Gm., Linn.)

This figure was drawn from a stuffed specimen of a bird, shot at Prestwick Car, near Newcastle, in the breeding season, and on comparing it with another bird, newly killed, at Otterburn, Northumberland, in September, 1821, it was evidently the same species; the difference consisted in the latter being somewhat larger. It weighed five ounces and three quarters; length fourteen inches and a half; and to the end of the toes sixteen inches and five-eighths; breadth twenty-four inches and a half. The plumage on the upper parts was also darker than in the former specimen. In both, the back, breast, belly, and vent, were pure white; the tails were also white, but partly tinged with yellow, and barred with brownish wavy lines. The legs and toes of both were dark green. The bill,

in the stuffed specimen, measures from the tip to the brow nearly two inches, and is of a dark colour; both mandibles are partly grooved, but towards the tips they are smooth and slender, and bent upwards; the legs are long and bare of feathers nearly an inch and a half above the knees, and from thence to the tread of the foot measure about two inches and a quarter; a dull brownish spot occupies the space between the bill and the orbits of the eyes, and a dingy white stripe passes above and below them; from the brow over the crown of the head, and down the hinder part of the neck, it is streaked with brown and pale ash; the sides of the neck to the shoulders are also nearly the same, but paler; and the fore part is slightly sprinkled down towards the breast. The scapulars, greater coverts and tertials, are more or less of a bronze brown, edged and tipped with dull rusty white; the latter are also edged, indented, and tipped with the same, and somewhat barred on the outer webs with dark spots. The quills are dark brown, the shaft of the first white, and most of them on the outer webs slightly edged and tipped with reddish white.

From the changes which take place in the plumage of the Scolopax and Tringa genera, ornithologists have always been puzzled in making out distinctly the different species, and we fear it will be long before their difficulties can be removed. Pennant first gave the name of Cinereous Godwit to this bird, and from him Latham, and then Montagu, have taken their descriptions.

THE CAMBRIDGE GODWIT.

"LARGER than the Common Redshank. Head, upper part of the neck, and back, cinereous brown: lesser wing coverts brown, edged with dull white, and barred with black: primaries dusky, whitish on their inner sides: secondaries barred, dusky, and white: under side of the neck and breast dirty white: belly and vent white: tail barred, cinereous, and black: legs orange: shot near Cambridge." *Latham.*

Montagu is of opinion that this is an immatured Redshank, and Temminck, that it is a nestling of the Spotted Redshank.

THE LESSER GODWIT.

JADREKA SNIPE.

(*Scolopax Limosa*, Linn.—*La Barge*, Buff.)

"LENGTH seventeen inches: weight nine ounces. Bill near four inches long, dusky, the base yellowish: irides white: the head and neck are cinereous: cheeks and chin white: back brown: on the wings a line of white: vent and rump white: two middle tail feathers black; the others white at the ends, which increases on the outer feathers, so as the exterior ones are white for nearly the whole length: legs dusky. This inhabits Iceland, Greenland, and Sweden. Migrates in flocks in the south of Russia. Seen about Lake Baikal: and is said also to have been met with in England."—*Latham.*

Montagu and Temminck think this the same species as the Red Godwit.

THE GREENSHANK.

GREEN-SHANKED GODWIT, OR GREEN-LEGGED HORSEMAN.

(*Scolopax Glottis*, Linn.—*La Barge variée*, Buff.)

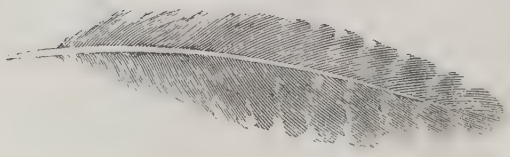
The Greenshank is of a slender and elegant shape, and its weight small in proportion to its length and dimensions, being only about six ounces, although it measures from the tip of its beak to the end of its tail fourteen inches, and to the toes twenty; and from tip to tip of the wings twenty-five. The bill is about two inches and a half long, straight and slender, the upper mandible black, the under reddish at its base. The upper parts of its plumage are pale brownish ash, but each feather is marked down the shaft with a glossy bronze brown: the under parts, and rump, are pure white: a whitish streak passes over each eye: the quill

feathers are dusky, plain on the outer webs, but the inner ones are speckled with white spots: the tail is white, crossed with dark waved bars: the legs long, bare about one inch above the knees, and dark green: the outer toe is connected by a membrane to the middle one as far as the first joint.

This species is not numerous in England, but they appear in small flocks, in the winter season, on the sea-shores and the adjacent marshes; their summer residence is the northern regions of Russia, Siberia, &c.; they are also met with in various parts of both Asia and America. Their flesh, like all the rest of this genus, is well-flavoured, and esteemed good eating.

The above figure and description were taken from a stuffed specimen in the Wycliffe Museum. Annexed is one of the tail feathers.*

* Temminck expresses himself greatly dissatisfied with both Latham and Gmelin's arrangement of the Scolopax Glottis. The identification of many of these birds seems so very imperfect, that we abstain from any remark on the subject.



THE SPOTTED REDSHANK.

RED-LEGGED GODWIT, SPOTTED SNIPE, OR BARKER.

(*Scolopax Totanus*, Linn.—*Le Chevalier rouge*, Buff.)

Length, from the tip of the bill to the end of the tail, twelve inches, and to the end of the toes fourteen inches and a half; breadth twenty-one inches and a quarter; weight above five ounces two drachms, avoirdupoise. The bill is slender, and measures two inches and a half from the corners of the mouth to the tip, and for half its length, nearest the base, is red; the other part black: irides hazel: head, neck, breast, and belly spotted in streaks, mottled and barred with dingy ash brown and dull white, darker on the crown and hinder part of the neck: throat white, and lines of the same colour pass from the upper sides of the beak over

each eye, from the corners of which two brown ones are extended to the nostrils: the ground colour of the shoulders, scapulars, lesser coverts, and tail, a glossy olive brown,—the feathers on all these parts are indented on the edges, more or less, with triangular-shaped white spots. Back white: rump barred with waved lines of ash brown, and dingy white: vent feathers marked nearly in the same manner, but with a greater portion of white: tail and coverts also barred with narrow waved lines, of a dull ash, and in some specimens nearly black and white. Five of the primary quills dark brown, tinged with olive; shaft of the first quill white; the next six, in the male, rather deeply tipped with white, and slightly spotted and barred with brown: secondaries, as far as they are uncovered, when the wings are extended, of the same snowy whiteness as the back. The feathers which cover the upper part of the thighs, and those near them, are blushed with a reddish or vinous colour: legs deep orange red, and measure, from the end of the middle toe nail to the upper bare part of the thigh, five inches and a half.

A stuffed specimen of this elegant-looking bird, from which the figure and description were taken, was the gift of Mr Riddiough, of Ormskirk; another of these birds, in perfect plumage, was shot by the late Mr John Bell, of Alemouth, merchant, in September, 1801; it differed from the former in being more sparingly spotted with white on the upper parts, and in its breast, belly, and the inside of the wings, being of a snowy whiteness, and its sides, under the wings, more delicately spotted with pale brown.

THE REDSHANK.

RED-LEGGED HORSEMAN, POOL SNIPE, OR SAND COCK.

(*Scolopax Calidris*, Linn.—*Le Chevalier aux Pieds Rouges*, Buff.)

This bird weighs about five ounces and a half: the length is twelve inches, breadth twenty-one. The bill, from the tip to the corners of the mouth, is more than an inch and three quarters long, black at the point, and red towards the base: the feathers on the crown of the head are dark brown, edged with pale rufous; a light or whitish line passes over, and surrounds each eye, from the corners of which a dark brown spot is extended to the beak: irides hazel: hinder part of the neck obscurely spotted with dark brown, on a rusty ash ground; throat and fore part more distinctly marked or streaked with spots of the same colour: on the

breast and belly, which are white, tinged with ash, the spots are thinly distributed, and are shaped something like the heads of arrows or darts. The general appearance of the upper parts of the plumage is glossy olive brown; some of the feathers quite plain, others spotted on the edges with dark brown, and those on the shoulders, scapulars, and tertials transversely marked with the same coloured waved bars, on a pale rusty ground: bastard wing and primary quills dark brown; inner webs of the latter deeply edged with white, freckled with brown, and some of those quills next the secondaries elegantly marked, near their tips, with narrow brown lines, pointed and shaped to the form of each feather: some of the secondaries are barred in nearly the same manner, others are white: back white: tail feathers and coverts beautifully marked with alternate bars of dusky and white, the middle ones slightly tinged with rust colour: legs red, and measure, from the end of the toes to the upper bare part of the thigh, four inches and a half.

This species is of a solitary character, being mostly seen alone, or in pairs only. It resides the greater part of the year in the fen countries, where it breeds and rears its young; lays four eggs, whitish, tinged with olive, and marked with irregular spots of black, chiefly on the thicker end. Pennant and Latham say, "it flies round its nest, when disturbed, making a noise like a Lapwing." It is not so common on the seashores as several others of its kindred species.

Ornithologists differ much in their descriptions of the Redshank, and probably have confounded it with others of the red-legged tribe, whose proper names are

yet wanting, or involved in doubt and uncertainty. Latham, in his Supplement, describes this bird as differing so much in its summer and winter dress, and in its weight, as to appear to be of two distinct species. There is reason to believe that several species of the *Scolopax* and *Tringa* genera, which have not yet been taken into the list of British Birds, appear occasionally in Great Britain, and that this circumstance, together with the difference of age and sex, has occasioned much confusion. The figure and description of this bird were taken from a specimen sent by the late Rev. J. Davies, of Trinity College, Cambridge: on comparing it with that figured in the *Planches Enluminees*, under the title of *Le Chevalier rayé*, and the Striated Sandpiper of Pennant and Latham, the difference was so slight, that there is no doubt of its being the same species; and Temminck seems to be decidedly of this opinion.

Of the Sandpiper.

The tongue is slender: in some, the toes divided; in others, the outer and middle toe connected as far as the first joint by a membrane; hinder toe weak: their bills are nearly of the same form as those of the preceding genus, but shorter, and slightly inclined downwards: their haunts and manner of life are also very similar. The history and classification of this genus are involved in much uncertainty.

They moult twice a year, at stated periods; the winter and summer plumage varying very much; the principal colours commonly changing from white to red, and from ash to black. The young, previous to the first moult, differ greatly from the old birds. The sexes are distinguished by their size only, the female being generally the largest.

THE RUFF.

(*Tringa pugnax*, Linn.—*Le Combattant*, Buff.)

The male of this curious species is called the Ruff, and the female the Reeve: they differ materially in their appearance: and also, what is remarkable in wild birds, it very rarely happens that two Ruffs are alike in the colours of their plumage.* The singular, wide-spreading, variegated tuft of feathers which, in the breeding season, grows out of their necks, is different in all. This tuft or ruff, a portion of which stands up like ears behind each eye, is in some black, in others black and yellow, and in others again white, rust colour, or barred with glossy violet, black and white.

* Buffon says that Klein compared above a hundred Ruffs together, and found only two that were similar.

They are, however, more nearly alike in other respects: they measure about a foot in length, and two in breadth, and, when first taken, weigh about seven ounces and a half; the female seldom exceeds four. The bill is more than an inch long, black at the tip, and reddish yellow towards the base; the irides are hazel: the whole face is covered with reddish tubercles, or pimples; wing coverts brownish ash: upper parts and the breast generally marked with transverse bars, and the scapulars with roundish-shaped glossy black spots, on a rusty-coloured ground: quills dusky: belly, vent, and tail coverts white: the tail is brown, the four middle feathers barred with black: legs yellow. The male does not acquire the ornament of his neck till the second season, and, before that time, is not easily distinguished from the female, except by being larger. After moulting, at the end of June, he loses his ruff and the red tubercles on his face, and from that time until the spring of the year, he again, in plumage, looks like his mate.

These birds leave Great Britain in the winter, and are then supposed to associate with others of the *Tringa* genus, among which they are no longer recognized as the Ruff and Reeve. In the Spring, as soon as they arrive again in England, and take up their abode in the fens where they were bred, each of the males (of which there appears to be a much greater number than of females) immediately fixes upon a particular dry or grassy spot in the marsh, about which he runs, until it is trodden bare: to this spot it appears he wishes to invite the female, and waits in expectation of her taking a joint possession, and becoming an inmate. As soon

as a single female arrives, and is heard or observed by the males, her feeble cry seems as if it roused them all to war, for they instantly begin to fight, and their combats are described as being both desperate and of long continuance: at the end of the battle, she becomes the prize of the victor.* It is at the time of these battles that they are caught in the greatest numbers in the nets of the fowlers, who watch for that opportunity: they are also, at other times, caught by clap, or day nets,† and are drawn together by means of a stuffed Reeve, or what is called a *stale bird*, which is placed in some suitable spot for that purpose.‡

* Buffon says, "they not only contend with each other in single rencounter, but they advance to combat in marshalled ranks."

† These nets, which are about fourteen yards long, and four broad, are fixed by the fowler over-night: at day-break in the morning he resorts to his stand, at a few hundred yards distance from the place, and at a fit opportunity pulls his cord, which causes his net to fall over and secure the prize. Pennant says, an old fowler told him he once caught forty-four birds at one haul, and, in all, six dozen that morning: he also adds, that a fowler will take forty or fifty dozen in a season. The females are always set at liberty.

‡ The Ruff is highly esteemed as a most delicious dish, and is sought after with great eagerness by the fowlers, who live by catching them and other fen birds for the markets of the metropolis, &c. Before they are offered for sale, they are commonly put up to feed for about a fortnight, and are during that time fed with boiled wheat, and bread and milk mixed with hempseed, to which sugar is sometimes added: by this mode of treatment they become very fat, and are often sold as high as two shillings and sixpence each.* They are cooked in the same manner as the Woodcock.

* In a note communicated by the late George Allan, Esq., of the Grange, near Darlington, he says, "I dined at the George Inn, Coney-street, York, August 18, 1794 (the race week), where four Ruffs made one of the dishes at the table, which, in the bill, were separately charged sixteen shillings."

The female, in the beginning of May, makes her nest in a dry tuft of grass, in the fens, and lays four white eggs, marked with rusty spots.

These birds are common in the summer season in the fens of Denmark, Sweden, and Russia, and are also found in other more northern regions, even as far as Iceland.

THE SHORE SANDPIPER.

(*Tringa littorea*, Linn.—*Le Chevalier varié*, Buff.)

Under this name Latham describes this bird, which, it is said, migrates from Sweden into England at the approach of winter. He makes it a variety of the last species, and says it does not differ materially from it. Temminck considers it, as well as the Equestrian Sandpiper, to be the Ruff in different stages of plumage. Montagu pronounces it the young of the Green Sandpiper.

THE LAPWING,

PEE-WIT, OR BASTARD PLOVER.

(*Tringa vanellus*, Linn.—*Le Vanneau*, Buff.)

Length thirteen inches and a half. Bill black; eyes large, and hazel; top of the head black, glossed with green; a tuft of long narrow feathers issues from the back part of the head, and turns upwards at the end; some of them four inches in length: sides of the head and neck white; which is interrupted by a blackish streak above and below the eye; back part of the neck very pale brown; fore part and the breast black: the back and wing coverts dark green, glossed with purple and blue reflections; quills black, the first four tipped with white; breast and belly pure white; upper tail coverts and vent pale chesnut; tail white at the base,

the rest of it black, with pale tips, outer feathers almost wholly white: legs red; claws black; hind claw very short.

This bird is a constant inhabitant of this country; but as it subsists chiefly on worms, it is forced to change its place in quest of food, and is frequently seen in great numbers by the sea-shores, where it finds an abundant supply. It is every where well known by its loud and incessant cries, which it repeats without intermission whilst on the wing, and from which in most languages a name has been given to it, imitative of the sound. The Pee-wit is a lively active bird, almost continually in motion; it sports and frolics in the air in all directions, and assumes a variety of attitudes; it remains long upon the wing, and sometimes rises to a considerable height; it runs along the ground very nimbly, and springs and bounds from spot to spot with great agility. The female lays four eggs, of a dirty olive, spotted with black: she makes no nest, but deposits them upon a little dry grass hastily scraped together: the young birds run very soon after they are hatched: during this period the old ones are very assiduous in their attention to their charge; on the approach of any person to the place of their deposit, they flutter round his head with cries of the greatest inquietude, which increase as he draws nearer the spot where the brood are squatted; in case of extremity, and as a last resourse, they run along the ground as if lame, in order to draw off the attention of the fowler from any further pursuit. The young Lapwings are first covered with a blackish down, interspersed with long white hairs, which they gradually lose, and about the latter end of July they acquire

their beautiful plumage. At this time they assemble in flocks, which hover in the air, saunter in the meadows, and, after rain, disperse among the ploughed fields.—In October, the Lapwings are very fat, and are then said to be excellent eating. Their eggs are considered as a great delicacy, and are sold in London at three shillings a dozen.

The following anecdote communicated by the late Rev. J. Carlyle, vicar of Newcastle, is worthy of notice, as it shews the domestic nature of this bird, as well as the art with which it conciliates the regard of animals differing from itself in nature, and generally considered as hostile to every species of the feathered tribe. Two of these birds, given to Mr. Carlyle, were put into a garden, where one of them soon died; the other continued to pick up such food as the place afforded, till winter deprived it of its usual supply; necessity soon compelled it to draw nearer the house, by which it gradually became familiarised to occasional interruptions from the family. At length a servant, when she had occasion to go into the back-kitchen with a light, observed that the Lapwing always uttered his cry "*pee-wit*" to obtain admittance. He soon grew more familiar; as the winter advanced, he approached as far as the kitchen, but with much caution, as that part of the house was generally inhabited by a dog and a cat, whose friendship the Lapwing at length conciliated so entirely, that it was his regular custom to resort to the fire-side as soon as it grew dark, and spend the evening and night with his two associates, sitting close by them, and partaking of the comforts of a warm fire-side. As soon as spring appeared, he left off coming to the house,

and betook himself to the garden; but, on the approach of winter, he had recourse to his old shelter and his old friends, who received him very cordially. Security was productive of insolence; what was at first obtained with caution, was afterwards taken without reserve: he frequently amused himself with washing in the bowl which was set for the dog to drink out of, and while he was thus employed, he showed marks of the greatest indignation if either of his companions presumed to interrupt him. He died in the asylum he had chosen, being choaked with something he had picked up from the floor. During his confinement, crumbs of wheaten bread were his principal food, which he preferred to any thing else.

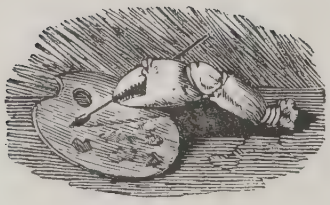
THE GREY PLOVER.

(*Tringa Squatarola*, Linn.—*Le Vanneau Pluvier*, Buff.)

The length of this bird is about twelve inches. The bill is black; the head, back, and wing coverts dusky brown, edged with greenish ash, and some with white; cheeks and throat white, marked with oblong dusky spots; belly, thighs, and rump white; sides marked with a few dusky spots; outer webs of the quills black; lower parts of the inner webs of the first four white; tail marked with alternate bars of black and white: legs dull green; hind toe small. In the *Planches Enlumineés* this bird is represented with eyes of an orange colour; there is likewise a dusky line extending from the bill underneath each eye, and a white one above it; but variations like these are common in many of

the same species of birds. This bird agrees with the Plovers in every other respect but that of having a very small hind toe, and does not bear any other relationship to either the Scolopax or Tringa genera. It is not very common in Britain, but it sometimes appears in large flocks on the sea coasts: it is somewhat larger than the Golden Plover. Its flesh is said to be very delicate.

Montagu pronounces the Grey Plover to be the Grey Sandpiper in the winter plumage, and he doubts not that the Tringa Helvetica, or Swiss Sandpiper, is the same bird in the breeding plumage. Latham also seems to be of this opinion.



THE GREEN SANDPIPER.

(*Tringa Ochropus*, Linn.—*Le Becasseau, ou Cul-blanc*, Buff.)

This bird measures about ten inches in length, to the end of the toes nearly twelve, and weighs about three ounces and a half. The bill is black, and an inch and a half long: a pale streak extends from it over each eye; between which and the corners of the mouth, there is a dusky patch. The crown of the head and hinder part of the neck are dingy brownish ash, in some narrowly streaked with white: throat white: fore part of the neck mottled or streaked with brown spots, on a white or pale ash ground. The whole upper parts of the plumage glossy bronze, or olive brown, elegantly marked on the edge of each feather with small roundish white spots: the quills are without spots, and of a darker brown: the secondaries and tertials very long: insides of the wings dusky,

edged with white grey; inside coverts next the body curiously barred, from the shaft of each feather to the edge, with narrow white lines, formed nearly of the shape of two sides of a triangle. Belly, vent, tail coverts, and tail, white: the last broadly barred with black, the middle feathers having four bars, and those next to them decreasing in the number of bars towards the outside feathers, which are quite plain: legs green.

This bird is not any where numerous, and is of a solitary disposition, seldom more than a pair being seen together, and that chiefly in the breeding season. It is scarce in England, but is said to be more common in the northern parts of the globe, even as far as Iceland. It is reported that they never frequent the sea-shores, but their places of abode are commonly on the margins of the lakes in the interior and mountainous parts of the country.

THE GAMBET.

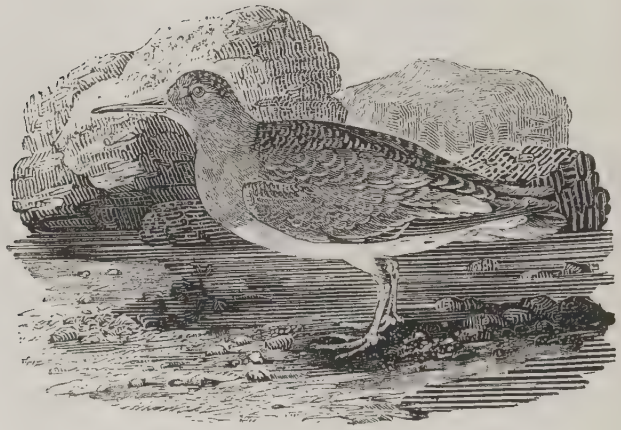
(*Tringa Gambetta*, Linn.—*La Gambette*, Buff.)

This is the Chevalier Rouge of Brisson, and the Red-legged Horseman of Albin. For want of a specimen of this bird, the following description is borrowed from Latham:—

"Size of the Greenshank: length twelve inches. Bill of a reddish colour, with a black tip: the irides yellowish green: head, back, and breast cinereous brown, spotted with dull yellow: wing coverts and scapulars cinereous, edged with dull yellow: prime quills dusky; shaft of the first white: tail dusky, bordered with yellow: legs yellow.* This inhabits England, but is not common: has been shot on the coast of Lincolnshire. Known in France: but is there a rare bird. Has a note not unlike the whistle of a Woodcock; and the flesh is esteemed. Inhabits Scandinavia and Iceland; called in the last *Stelkr*. It has also been taken in the frozen sea between Asia and America."

Montagu says, this is among the endless variety of the Tringa Pugnax; Temminck does not appear to have given it a place, except as one of the states of the Redshank.

* The figure of this bird in the *Planches Enlumineés* of Buffon is red-legged, and also differs in plumage from this description.



THE KNOT.

KNUTE, OR KNOUT.

(*Tringa Canutus*, Linn.—*Le Canut*, Buff.)

These birds, which seem to be a connecting link between the Scolopax and Tringa genera, differ considerably from each other in the appearance of their plumage, in different seasons of the year, as well as from age and sex. The specimen from which the above drawing was taken measured, from the point of the bill to the tip of the tail, eight inches and a half; the extended wings about fifteen; and it weighed two ounces eight drachms: bill one inch and three-eighths long, black at the tip, and dusky, fading into orange towards the base; tongue of nearly the same length, sharp and horny at the point; sides of the head, neck, and breast, cinereous, edged with ash grey; chin white,

and a stroke of the same passes over each eye. All the upper parts of the plumage darkish brown, but more deep and glossy on the crown of the head, back, and scapulars, and each feather edged with ash or grey; under parts cream-coloured white, streaked or spotted with brown on the sides and vent; greater coverts of the wings tipped with white, forming a bar across them when extended: legs reddish yellow, and short, not measuring more than two inches and one-eighth from the middle toe nail to the knee: thighs feathered very nearly to the knees; toes divided, without any connecting membrane.

The Knot is caught in Lincolnshire, and the other fenny counties, in great numbers,* by nets, into which it is decoyed by carved wooden figures, painted to represent itself, and placed within them, much in the same way as the Ruff. It is also fattened for sale, and esteemed by many equal to the Ruff in the delicacy of its flavour. The season for taking it is from August to November, after which the frost compels it to disappear.

This bird is said to have been a favourite dish with Canute, king of England; and Camden observes, that its name is derived from his—Knute, or Knout, as he was called, which, in process of time, has been changed to Knot.

* Pennant says, fourteen dozen have been taken at once.

THE SELNINGER SANDPIPER.

(*Tringa Maritima*, Brun:—*Le Chevalier rayé*, Buff.)

The base of the bill is reddish; the rest of it to the tip black; the head and neck are dusky brown, tinged with ash, and somewhat clouded on the latter; the side of the brow, a little before the eye, is marked with a whitish spot; the chin and gullet are white; on the upper part of the breast the feathers are dusky, like the neck, and fringed with white, but they appear grey: the lesser coverts of the wings the same, but much darker in the middle, and much lighter on the edges: the back, scapulars, secondaries, and tertials, are deepish brown, more or less bronzed and edged with dull grey: and the latter and secondaries are edged and tipped with white; the quills are deep dusky brown, very narrowly edged with dull white; the tail

is also the same, with the edges of the two outside feathers white; the under parts are white, spotted on the sides to the tail, with dull brown; the legs are yellow, short, and, like the Knot's, are feathered to the knees.

This Sandpiper seems, from its resemblance to the Knot, to bear a strong affinity or relationship to a family of that species. Latham gives, under the above name, a short and imperfect account of it. He says, it inhabits Norway and Iceland, lives about the sea shore, and emits a piping note. Montagu, also, does not seem to know much of its history; he calls it the Purple Sandpiper, and makes it the Tringa nigricans of the Linnæan Transactions, and also the Striated Sandpiper of the Arctic Zoology, and gives synonymes of other authors. He does not say why it has been called the Purple Sandpiper, and in the above specimen, it has not a shade of that colour on its plumage. This bird, an old male, was shot near Yarmouth, and the preserved specimen was obligingly lent to this work by Mr. Yarrel.

THE RED SANDPIPER.

(Tringa Islandica, Linn.)

The above figure was taken from the stuffed specimen of a bird shot at Sunderland, in January of the severe winter of 1814, and presented to this work by Mr. Bullock, of the London Museum. The bill is rather thick at the base, black, grooved on both mandibles, and about an inch and a half long from the tip to the brow, whence, over the head and down the hinder part of the neck, it is streaked with rufous and dark brown; between the bill and the eyes, and the auriculars, it is spotted and streaked with the same colours; the shoulders, back, and scapulars are black, edged, tipped, and spotted with various shades of rufous, yellow, and dingy white, and the tertials are prettily indented with the same colours; the greater

coverts are ash, tipped with white; the bastard wing and primary quills are black, the former edged and largely tipped with white, and some of the latter slightly edged with the same, with the shafts also white; the neck, breast, and belly are of a rufous pale chesnut; the under coverts of the tail are white, dashed with patches of rufous and a few dusky spots; the rump and tail coverts are white, prettily marked with bars and spots of dark brown; the tail is ash.

A preserved specimen, and also a finished drawing of the same species, were sent to us by Mr. Charles Fothergill; the plumage of the former, though somewhat dishevelled in stuffing, was more prettily marked and variegated than that of our bird. This shews the changeable appearances the tribe assumes under the influence of age, season, or climate.

THE ASH-COLOURED SANDPIPER

(*Tringa cinerea*, Gm. Linn.)

Weighs between four and five ounces, and measures ten inches in length, and about nineteen in breadth. The whole upper parts of the plumage are of a brownish ash: head spotted, and the neck streaked with dusky lines: feathers of the back, scapulars, and wing coverts, elegantly marked or bordered on their ridges and tips, with two narrow lines of dull white and dark brown. Some specimens have black spots on the breast, but most commonly the whole under parts are pure white: tail cinereous, edged with white, and its

coverts barred with black: legs dirty green: toes edged with a fine narrow scalloped membrane.

The Ash-coloured Sandpiper, it is said, breeds in the northern parts of both Europe and America. Pennant says they appear in vast flocks on the shores of Flintshire in the winter season; and Latham, that they are seen in vast numbers on the Seal-Islands, near Chateaux Bay; and also that they breed and remain the whole summer at Hudson's Bay, where they are called by the natives *Sasqua pisqua nishish.*

Montagu says, this is the Knot in its young or autumnal plumage; and so do Temminck and Sabine. In its summer plumage it is the Tringa Islandica of Latham. The young birds appear to correspond to the Dusky, Speckled, and Southern Sandpiper of authors. Temminck declares that the Knot has been described by systematic writers under no less than seven different names.

THE WOOD SANDPIPER.

LONG-LEGGED SANDPIPER.

(*Tringa glareola*, Faun. Suec.)

This species of Tringa appears to be a rare bird in this country, and to find proper names for it has been attended with doubts and difficulties. Latham names it glareola, but treats of it as a variety of the Tringa ochropus (Green Sandpiper) of Linnæus, and the Tringa littorea, or young of the same, and also as the Shore Sandpiper of the Arctic Zoology. Montagu considers this bird to be quite distinct from the Green Sandpiper or any of its varieties, and wishes to change its name from Wood Sandpiper to Long-legged Sandpiper, to prevent its being confounded with any of

these; but as it is not very remarkable for the length of its legs, those of others of the same genus being about as long, we have thought it best to retain his former name.

The upper mandible appears dusky, the under one reddish, a dark streak passes from the bill to the eyes, and a whitish one over them; the upper part of the head to the nape is bronze brown, narrowly streaked with ferruginous; cheeks mottled with dingy white and dull brown: the throat and breast the same, but becoming more dappled on the sides of the breast, the fore part of which and the throat are mostly dull white and pale brown; the rest of the neck is streaked with the same dingy colours; the upper plumage (like the head) is bronzed brown, spotted with reddish dull or rusty white, and the scapulars and tertials are indented more or less with deeper shades of the same colour: the legs seemed to have been green. The specimen from which the above figure was engraven, was obligingly lent to this work by N. A. Vigors, Esq.

THE COMMON SANDPIPER.

(*Tringa hypoleucos*, Linn.—*La Guignette*, Buff.)

This bird weighs about two ounces, and measures seven inches and a half in length. The bill is about an inch long, black at the tip, fading into pale brown towards the base. The head and hinder part of the neck are brownish ash, streaked downwards with dark narrow lines: the throat is white, and a streak of the same colour surrounds and is extended over each eye: the cheeks and auriculars are streaked with brown: the fore part of the neck to the breast is white, mottled and streaked with spots and lines of brown, pointing downwards: in some the breast is plain white: belly and vent white. The ground colour of all the upper parts of the plumage is ash, blended with glossy olive bronze brown: the coverts, scapulars, lower part of the

back and tail coverts, are edged with dull white, and most elegantly marked with transverse dark narrow waved lines: the first two quills are plain brown; the next nine are marked on the middle of their inner webs, with white spots; the secondaries are also marked in the same manner, on both webs, and tipped with white. The tail consists of twelve feathers: the four middle ones olive brown, dark at the tips; those next, on each side, are much lighter coloured, mottled with dark brown, and tipped with white; the two outside ones are edged and tipped in the same manner, but are barred on their webs with dark brown: legs pale dull green, faintly blushed with red.

This description was taken from a perfect bird, the present of the right honourable Lord Charles Aynsley, of Little-Harle Tower, Northumberland, in May, 1798. By comparing it with other birds, and other descriptions, (no doubt taken with equal accuracy,) the truth of the observation so often made, that two birds even of the same species are very seldom exactly alike, will be proved.

This elegant little bird breeds in this country, but the species is not numerous; yet they are frequently seen in pairs during the summer months; and are well known by their clear piping note, by their flight, by jerking up their tails, and by their manner of running after their insect prey on the pebbly margins of brooks and rivers. The female makes her nest in a hole on the ground near their haunts; her eggs, commonly five in number, are much mottled and marked with dark spots, on a yellowish ground. They leave England in the autumn, but whither they go is not particularly

noticed. Buffon says they retire far north; and Pennant and Latham, that they are met with in Siberia and Kamtschatka, and are also not uncommon in North America.

THE BROWN SANDPIPER.

(Tringa Fusca, Lath.)

Pennant describes this bird, which he says was bought in London market, and preserved in the collection of the late M. Tunstall, Esq., of Wycliffe:—"Size of a Jacksnipe: the bill is black; the head, upper part of the neck, and back, are of a pale brown, spotted with black: coverts of the wings dusky, edged with dirty white: under side of the neck white, streaked with black: the belly white: tail cinereous: legs black."

Montagu suspects this to be a variety of the Little Stint.

THE GREENWICH SANDPIPER.

(Tringa Grenovicensis, Lath.)

"Size of the Redshank: weight nearly eight ounces: length twelve inches and a half. Bill an inch and a half long, black: crown of the head reddish brown, streaked with black: nape, cheeks, and neck, ash colour; the middle of the feathers dusky down the shaft: lower part of the neck and back black; the feathers margined on the sides with pale ferruginous, and some of those of the back at the tips also: chin nearly white: fore

part of the neck very pale ash colour, as far as the breast, which is of a dusky white; belly, sides, vent, and upper tail coverts on each side, and the whole of the under ones, white: lesser wing coverts ash colour; the greater the same, obscurely margined with pale ferruginous: greatest tipped with white; under wing coverts pure white; prime quills dusky, the shafts more or less white; secondaries and scapulars nearly the colour of the back: the secondaries and primaries very little differing in length: the lower part of the back, rump, and middle of the tail coverts, ash colour: tail a little rounded at the end, brownish ash colour, somewhat mottled with brownish near the tips, and fringed near to the end with pale ferruginous: legs dusky olive green, bare an inch above the knee: the outer and middle toe connected at the base." The bird from which the above description was taken, was shot by Dr. Leith, at Greenwich, on the 5th of August, 1785, and sent to Latham, who considered it as a new species.

Montagu says, he has ascertained this bird to be the Ruff in its winter plumage, after it has cast the long feathers which adorn its head and neck in the breeding season.

THE BLACK SANDPIPER.

(Tringa Lincolniensis.)

We formerly gave a description of this bird from Pennant, but Montagu thinks it should be added to the synonyms of the Purple Sandpiper. Temminck does not notice it as a distinct species.

THE SPOTTED SANDPIPER.

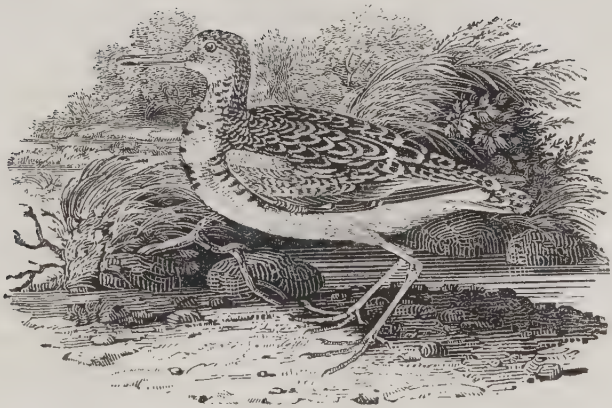
SPOTTED TRINGA.

(*Tringa macularia*, Linn.—*La Grive d'eau*, Buff.)

This bird measures about eight inches in length. The bill is black at the tip, and fades into reddish towards the base; a white streak is extended over each eye, and a brownish patch between them and the bill: the whole upper part of the plumage is glossy light brown, with green reflections: the head and neck are marked with longish small dark spots: on the back, scapulars, and wing coverts the spots are larger, and of a triangular shape: the rump is plain: the greater quills are dusky; secondaries tipped with white; as are also the greater and lesser coverts, which form two oblique white lines across the extended wings: the two middle feathers of the tail are greenish brown; the side

ones white, crossed with dusky lines: the breast, belly, and vent are white, but, in the female, spotted with brown: legs dirty flesh red.

This species is not common in England. The specimen from which the foregoing figure was drawn was shot in the month of August, on the bleak moors above Bellingham, in Northumberland.



THE RED-LEGGED SANDPIPER.

*(Tringa Bewickii,** Mont.)

This bird measures from the tip of the beak to the end of the tail, ten inches. The bill is an inch and three-eighths long, black at the tip, and reddish towards the base: crown of the head spotted with dark brown, disposed in streaks, and edged with pale brown and grey: a darkish patch covers the space between the corners of the mouth and the eyes: chin white: brow and cheeks pale brown, prettily freckled with small dark spots: hinder part of the neck composed of a mixture of pale brown, grey, and ash, with a few indistinct dusky spots; fore part and breast white, clouded with a dull cinnamon colour, and sparingly and

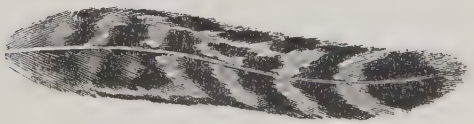
* Although Montagu has named this bird Tringa Bewickii, there is some reason to suspect that it may prove to be the Ruff in one of its many diversified states of plumage.

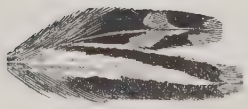
irregularly marked with black spots, reflecting a purple gloss: shoulder and scapular feathers black, edged with pale rust, and having the same glossy reflections as those on the breast: tertials nearly of the same length as the quills, and marked like the first annexed figure: ridges of the wings brownish ash; coverts, back, and rump nearly the same, but inclining to olive, and the middle of each feather of a deeper dusky brown: primary quills deep olive brown: exterior webs of the secondaries also of that colour, but lighter, edged and tipped with white, and the inner webs are mostly white towards the base: tail coverts glossy black, edged with pale rust, and tipped with white; but in some of them a streak of white passes from the middle upwards, nearly the whole length, as in the second figure. The tail feathers are lightish brown, except the two middle ones, which are barred with large spots of a darker hue: the belly and vent white; legs bare above the knees, and red as sealing wax; claws black. The female is less than the male, and her plumage more dingy and indistinct: an egg taken out of her, previous to stuffing, was surprisingly large, considering her bulk, being about the size of that of a Magpie, of a greenish white colour, spotted and blotched with brown, of a long shape, and pointed at the smaller end.

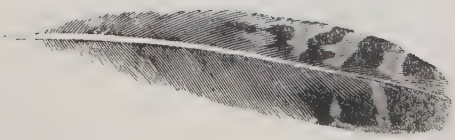
The foregoing figure and description were taken from a pair, male and female, which were shot on Rippengale Fen, in Lincolnshire, on the 14th of May, 1799, by Major Charles Dilke, of the Warwickshire Cavalry, who also obligingly pointed out several leading features of these birds, in which they differ materially from the *Scolopax Calidris* of Linnæus, called

here the Redshank or Poolsnipe. He says, "this bird is a constant inhabitant of the fens, and is known to sportsmen by its singular notes, which are very loud and melodious, and are heard even when the bird is beyond the reach of sight."

The description of this bird (which, it seems, is common in the fen countries,) has been more particularly attended to, because it has not been noticed in any of the popular works on Ornithology; at least not so accurately as to enable a naturalist to distinguish it by the proper name. Annexed are the scapular, rump, and tail feathers of this bird.







THE DUNLIN

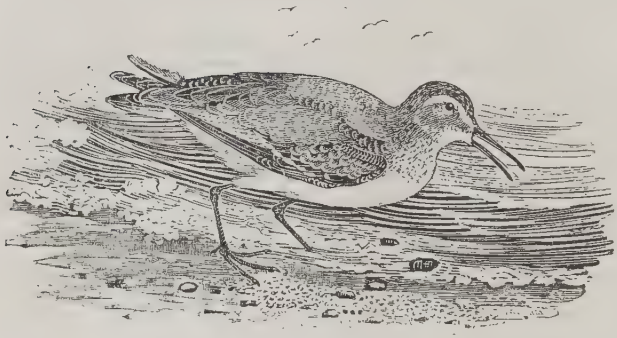
(*Tringa alpina*, Linn.—*La Brunette*, Buff.)

Is nearly of the size of the Judcock, and its bill is of the same shape, but much shorter in proportion to the bulk: it may also be easily distinguished among its associates, the Purres, Dotterels, Sanderlings, &c. by the redness of the upper parts of its plumage; the ground colour of which, from the beak to the rump, is ferruginous, or rusty red; but the middle of each feather is black, and the edges of some of them narrowly fringed with yellowish white, or ash grey: in some specimens the lesser wing coverts are dingy ash brown; in others clear brown, edged with ferruginous rather deeply: the quills and greater coverts are dark brown the latter deeply tipped with white, which, together with the bases of the secondaries, forms an oblique bar across the extended wings: the primaries, except the first three, are edged on the exterior webs with white; shafts also mostly white, and each feather

is sharply pencilled and distinctly defined with a light colour about the tips: a darkish spot covers each side of the head, from the corners of the mouth, and a pale streak passes from the bill over each eye: the throat and fore part of the neck, to the breast, are yellowish white, mottled with brown spots: a dusky crescent-shaped patch, the feathers of which are narrowly edged with white, covers the breast, the horns pointing towards the thighs:* the belly and vent are white: the middle tail feathers black, edged with ferruginous; the others pale ash, edged with white; legs and thighs black. The female is rather larger than the male, but, in other respects, resembles him pretty nearly.

The above description and figure were taken from a pair sent by the Rev. C. Rudston, of Sandhutton, near York, the 22nd of April, 1799; and the author has been favoured with numbers of these, and others of the same genus, by the Rev. H. Cotes, vicar of Bedlington; not two of which were exactly alike, probably owing to the difference of age or sex.

* In some specimens, supposed to be female, this patch was wanting.



THE PURRE*

(*Tringa Cinclus*, Linn.—*L'Alouette de Mer*, Buff.)

Measures about seven inches and a half in length, and in breadth about fourteen; but sometimes rather more. The bill is black, grooved on the sides of the upper mandible, and about an inch and a quarter in length: tongue nearly the same length, sharp and hard at the point: a whitish line runs from the brow over each eye, and a brownish one from the sides of the mouth to the eyes, and over the cheeks: the fore part of the neck is pale ash, mottled with brown: the head, hinder part of the neck, upper part of the back, and the scapulars, are brownish ash, but the middle of the feathers on these parts is dark brown; hence there is a more or less mottled and streaked appearance in different birds. The scapular feathers, next the back, are

* In the north of England these birds are called Stints; in other parts, the Least Snipe, Ox-Bird, Ox-Eye, Bull's Eye, Sea-Lark, and Wagtail.

deep brown, edged with bright ferruginous; tertials, rump, and tail coverts nearly the same: bastard wing, primary and secondary quills, deep brown: lesser coverts brown, edged with yellowish white: greater coverts of nearly the same colour, but tipped with white: throat, breast, belly, and vent, white: the two middle feathers of the tail dusky: the rest ash: legs, thighs, and toes black, inclining to green. The female has not the bright ferruginous-edged feathers on the upper scapulars, and her whole plumage is more uniformly of a brownish ash, mixed with grey.

The Purre, with others of the same genus, appears in great numbers on the sea-shores, in various parts of Great Britain, during the winter season: they run nimbly near the edges of the flowing and retiring waves, and are almost perpetually wagging their tails, whilst they are at the same time busily employed in picking up their food, which consists chiefly of small worms and insects. On taking flight, they give a kind of scream, and skim along near the surface of the water with great rapidity, as well as with great regularity: they do not fly directly forward, but perform their evolutions in large semi-circles, alternately in their sweep approaching the shore and the sea, and the curvature of their course is pointed out by the flocks appearing suddenly and alternately in a dark or in a snowy white colour, as their backs or their bellies are turned to or from the spectator.*

* It is somewhat remarkable that birds of different species, such as the Ring-Dotterel, Sanderling, &c. which associate with the Purre, Dunlin, &c. should understand the signal, which from their wheeling

The Purre leaves this country in the spring, but whither it retires to breed is not yet known. It is said to be widely dispersed over both Europe and America.

By the kindness of his friends the author has been furnished with many of these birds: and, on the most minute inspection, as has before been noticed in respect of others of this genus, they all differed in a greater or less degree from each other.*

about altogether, with such promptitude and good order, it would appear is given to the whole flock.

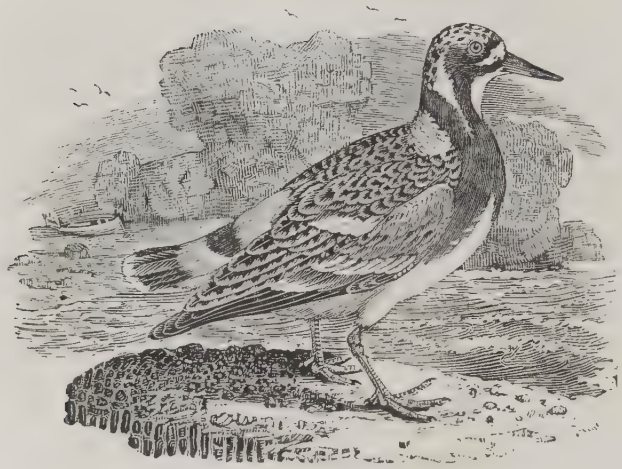
* In a variety of this species, obligingly presented by George Strickland, Esq., of Ripon, the bill was bent a little downward; and the fore part of the neck and the breast were of a pale reddish buff colour: in other respects it did not differ materially.

THE LITTLE STINT.

LITTLE SANDPIPER, OR LEAST SNIPE.

(*Tringa pusilla*, Linn.—*La petite Alouette de Mer*, Brisson.)

This bird, the least of the Sandpiper tribe, nearly resembles the last species. It weighs twelve penny-weights troy; length nearly six inches; breadth rather more than eleven; the bill, to the corners of the mouth, is five-eighths of an inch. The feathers on the crown of the head are black, edged with rusty: it is marked, like most of the genus, by a light streak over each eye, and a dark spot below and before them: the throat, fore part of the neck, and belly, are white; and the breast is tinged with pale reddish yellow: the shoulders and scapulars black, edged with white on the exterior webs of each feather, and on the interior with rust: back and tail dusky: legs slender, and nearly black. This figure and description were taken from a bird shot by Robert Pearson, Esq., of Newcastle, on the 10th of Sept., 1801.



THE TURNSTONE.

SEA DOTTEREL, OR HEBRIDAL SANDPIPER.

(*Tringa Interpres*, Linn.—*Le Coulon-chaud*, Buff.)

This is a plump-made, and prettily variegated bird, and measures about eight inches and a quarter in length. The bill is black, straight, strong, and not more than an inch in length: the ground colour of the head and neck white, with small spots on the crown and hinder parts; a black stroke crosses the forehead to the eyes: the auriculars are formed by a patch of the same colour, which, pointing forward to the corners of the mouth, and falling down, is spread over the sides of the breast, whence ascends another branch, which, like a band, goes about the lower part of the neck behind.* The back, scapulars, and tertials are

* In some specimens the lower part of the neck is white.

black, edged with rusty red: lesser coverts of the wings cinereous brown; greater coverts black, edged with ferruginous, and tipped with white; primary and secondary quills black, the latter white at the ends: rump and tail coverts white, crossed with a black bar: tail black, tipped with white: fore part of the breast, belly, and vent white: thighs feathered nearly to the knees: legs and feet red. This and the succeeding bird are now said to be the same species, and differing only from age or sex. It is obvious that it ought to be separated from the genus Tringa, to which it bears little affinity or resemblance. Temminck has done so, and formed it into a new genus (Strepsilas).

THE TURNSTONE.

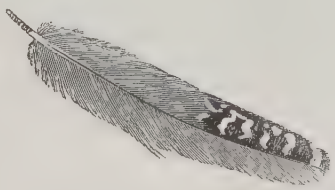
(*Tringa Morinella*, Linn.—*Le Coulon-chaud cendré*, Buff.)

This is like the preceding in size and shape. The bill is short, strong, thick at the base, and of a dark horn-colour, tinged with red: the crown and hinder part of the head are dusky, edged with greyish brown; the fore part, from the eyes to the bill, pale brown; a curved patch or band of the latter colour bounds the lower part of the neck, points forward, and falls down towards the points of the wings; between this band and the head is a demi-ring of brownish black, which nearly surrounds the neck, a branch from which strikes upwards to the corners of the mouth, and another falls down, forming a kind of inverted gorget on the fore part of the neck, and sides of the breast: the colour of the throat is white, which tapers to a point on the fore part of the neck: upper parts of the plumage dusky,

edged with rusty or brownish red; but some of the scapulars next to the wings are partly edged with white: tertials long, and deeply edged and tipped with a fine pale rufous brown: ridge of the wings and bastard quills brownish black: lesser coverts adjoining the ridge, white: primaries and secondaries black, the bases of the former, and tips of the latter, white; the greater coverts are also deeply tipped with white, which, when the wing is extended, forms a bar quite across it: the under parts of the plumage, the back, and tail coverts are white, excepting a black patch which crosses the rump. The tail consists of twelve black feathers, tipped with white, except the two middle ones, which are entirely black: legs and toes short, and orange red. The male excels the female in the beauty of his plumage; her piebald marks are not so distinct, and her colours are uniformly more dull and confused.

Turnstones frequent the sea-shores in various parts of Great Britain, and have obtained their name from their manner of turning over small stones in quest of their prey, which consists of small marine insects, worms, and bivalve shell-fish.

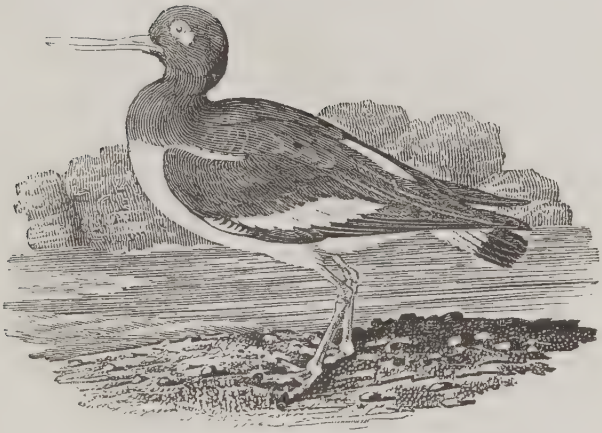
This bird is chiefly confined to the northern, as is the former to the southern parts of Great Britain.



Of the Oyster-Catcher.

Bill long, compressed and cuneated at the end; nostrils linear; tongue scarcely a third of the length of the bill; toes, three in number, all placed forward, the exteriors united to the middle by a strong membrane, as far as the first joint.

This genus of birds, of which there is but a single European species, though no where numerous, is widely dispersed over the globe, being met with in every country. Their solicitude for the safety of their young is very great, and their shrill piercing cries, uttered for that purpose, are a source of annoyance to the fowler, by alarming and putting on the alert other birds of which he is in pursuit. They moult in the spring and autumn, but the plumage undergoes very little change.



THE OYSTER-CATCHER.

PIED OYSTER-CATCHER, OR SEA-PIE.

(*Hæmatopus Ostralegus*, Linn.—*L'Huîtrier*, Buff.)

The Oyster-catcher generally weighs about sixteen ounces, measures seventeen inches in length, and two feet eight inches in breadth. The bill is bright scarlet, about three inches long, wide at the nostrils, and grooved beyond them nearly half its length; thence to the tip it is vertically compressed on the sides, and in old birds ends obtusely: with this instrument, which, in its shape and structure, is peculiar to this bird, it easily disengages the limpets from the rocks, and is said to pluck out the oysters from their half-opened shells: on these it feeds, as well as on other kinds of shell-fish, sea-worms, and insects. The irides are lake red; orbits orange; under orbit white, and (in many specimens) a crescent-shaped stroke of this colour crosses the throat; head, neck, upper part of the back,

scapulars, lesser coverts of the wings, and end of the tail, black; quills, in some, dark brown, striped less or more in the middle and inner webs with white: secondary quills white towards their base, the uncovered points black, narrowly edged with white; breast, belly, vent, upper half of the tail, lower part of the back, and greater wing coverts, white: legs and feet pale red; the toes, three in number, are short and strong, each surrounded with a membraneous edge, and covered with a hard scaly skin, which enables the bird to traverse and climb the rough and sharp shell-covered rocks, in quest of prey, without injury.

Although the Oyster-catcher is not provided with powers fitted for an expert swimmer, yet it does not show any aversion to taking the water, upon which it may be said to float rather than to swim. When wounded and pursued, it can dive with great quickness, and remain a considerable time under water. These birds are almost constant inhabitants of the sea-shores, being seldom found inland. In winter they assemble in flocks, are then shy and wild, and are seen in pairs in the breeding season and in the summer only. The female deposits her eggs in an open and dry situation, out of tide-mark, sheltered merely by a tuft of bent grass, without any other nest than the bare sand and fragments of shells, blown thither by the wind. She lays three or four eggs of a greenish grey, spotted with black, which she leaves during the day exposed to the influence of the sun, and is careful to sit upon them herself only during the night and in bad weather. The young ones may easily be tamed, and will associate with domestic poultry.

Of the Avoset.

Bill very long, slender, weak, depressed throughout; the point flexible, and bending considerably upwards; nostrils narrow, pervious, and linear; tongue short: legs very long; feet much palmated, the webs deeply indented from the nails towards their middle; back toe placed high, and very small.

The Avoset is migratory, and is met with in temperate climates, on the shores in various parts of Europe.

THE AVOSET.

SCOOPER, CROOKED-BILL, OR YELPER.

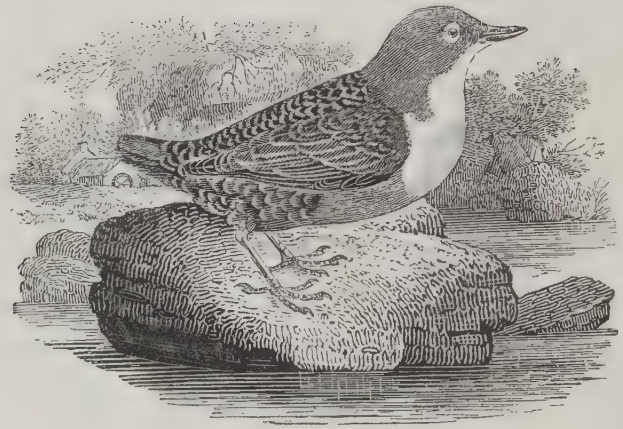
(*Recurvirostra Avocetta*, Linn.—*L' Avocette*, Buff.)

This bird, which is the only European species of Avoset, does not much exceed the Lapwing in the bulk of its body; but, from the length of its legs, it is much taller.

It measures about eighteen inches in length, to the end of the toes twenty-two, from tip to tip thirty, and weighs from twelve to fourteen ounces. The bill is black, about three inches and a half long, and of a singular conformation, looking not unlike flexible flat pieces of whalebone, curved upwards to the tip: irides hazel: head round, black on the upper part to below the nape of the neck: above and beneath each eye, in most specimens, there are small white spots; but in the

one from which the above figure was taken, a streak of that colour passed over each eye towards the hinder part of the head. The thighs are naked, and, as well as the legs and feet, are of a fine pale blue. The whole plumage of the Avoset is white, intersected with black; and, like most of the variegated or piebald birds, the patches of these colours are not placed exactly the same in every individual; therefore, as the bird cannot be mistaken, a more minute description is unnecessary.

These birds are common in the winter about the lakes, mouths of rivers, and marshes, in the southern parts of England; and assemble in large flocks on the fens, in the breeding season. When the female is frightened off her nest, she counterfeits lameness; and when a flock is disturbed, they fly with their necks stretched out, and their legs extended behind, over the head of the spectator, much in the same way as the Lapwing, making a shrill noise, and uttering a yelping cry of *twit, twit,* all the time. The places where they have been feeding may be traced out by the semi-circular marks left in the mud or sand by their bills in scooping out their food, which consists of spawn, worms, insects, &c. Latham says, "they lay two eggs, the size of those of a Pigeon, an inch and three-quarters in length, of a cinereous grey, singularly marked with deep brownish dark patches, of irregular sizes and shapes, besides some under markings of a dusky hue." They keep near the shore, wading about, up to the belly in the water, and sometimes swimming. In all their motions they are smart, lively, and volatile, and do not remain long stationary in one spot. The drawing was done from a stuffed specimen at Wycliffe.



THE WATER OUZEL.

WATER CROW, DIPPER, OR WATER PIOT.

(*Sturnus Cinclus*, Linn.—*Le Merle d'Eau*, Buff.)

The length of the Water Ouzel is about seven inches and a half from the point of the beak to the end of its tail, which is very short, and gives the bird a thick and stumpy appearance. The mouth is wide; the bill black, about three-quarters of an inch long; the upper mandible rather hollow in the middle, and bent a little downwards at the point; orbits white, irides hazel. The upper parts of the head and of the neck are deepish rusty brown; the back, rump, scapulars, wing coverts, belly, vent, and tail, are black; but each feather on these parts is distinctly edged with hoary grey. The breast, fore part of the neck and throat are of a snowy white; and the black and white on the belly

and breast are separated by a rusty brown. The legs and toes are short and strong, the scales pale blue, the hinder part and joints brown; the claws are curved, and the toes are distinctly parted, without any membrane between to join them.

This solitary species is removed from the place it has hitherto holden in all systems among the land birds: it ought not to be classed any longer with the Ouzels and Thrushes, to which it bears no affinity. Its manners and habits are also different from those birds, and are peculiar to itself. It is chiefly found in the high and mountainous parts of the country, and always by the sides of brooks and rocky rivers, but particularly where they fall in cascades, or run with great rapidity among stones and fragments of broken rocks; there it may be seen perched on the top of a stone in the midst of a torrent, in a continual dipping motion, or short courtesy often repeated, whilst watching for its food, which consists of small fishes and insects. The feathers, like those of the Duck tribe, are impervious to water, whereby it is enabled to continue a long time in that fluid without sustaining injury. But the most singular trait in its character is that of its possessing the power of walking, in quest of its prey, on the pebbly bottom of a river, and with the same ease as on dry land.* The female makes her nest in the banks of

* Being, from its specific gravity, much lighter than water, the circumstance of its walking so easily at the bottom of the water is doubted. Montagu admits his having seen it, but says, it appeared to tumble about in a very extraordinary manner, with its head downwards, as if pecking something; and, at the same time, using great exertion both with its wings and legs.

a rivulet, sometimes behind a water-fall when it overshoots a steep rock, and thus leaves a vacuum: it is nearly of the same form as that of a common Wren; she lays four or five eggs, which are white, lightly blushed with red.

THE KING-FISHER.

(*Alcedo ipsida*, Linn.—*Le Martin-pêcheur*, Buff.)

This splendid little bird is of rather a clumsy shape, the head being large in proportion to the size of the body, and the legs and feet very small. The length is only seven inches, breadth eleven; weight about two ounces and a quarter. The bill, measured from the corners of the mouth, is two inches long, vertically compressed on the sides, strong, straight, and tapering to a sharp point: the upper mandible is black, fading into red towards the base; the under one, as well as the inside of the mouth, reddish orange: irides hazel, inclining to red. A broad stripe passes from the bill over the eye to the hinder part of the neck, of a bright orange, but margined on the side of the mouth, and crossed below the eye, by a narrow black stroke, and terminated behind the auriculars with a slanting wedge-

shaped white spot. The throat is white; the head and the wing coverts are a deep-shining green, spotted with bright light blue: the scapulars and exterior webs of the quills are of the same colour, but without spots. The middle of the back, the rump, and coverts of the tail are of a most resplendent azure: the tail, which consists of twelve short feathers, is deep rich blue, and the whole under part of the body, bright orange. The legs and toes are red, and are peculiar in their shape and conformation, the three forward toes being unconnected from the claws to the first joints, from whence they appear as if grown into each other; and the inner and hinder ones are placed in a line on the inside of the foot, whereby the heel is widened, and seems pressed out.

It is difficult to conceive why ornithologists have classed the King-fisher with land birds, as its habits and manner of living are wholly confined to the fresh waters, on the margins of which it will sit for hours together on a projecting twig, or stone; at one while fluttering its wings, and exposing its brilliant plumage to the sun; at another, hovering in the air like the Kestril, it waits the moment when it may seize its prey, on which it darts almost unerringly: often it remains for several seconds under water, before it has gained the object of its pursuit, then brings up the little fish, which it carries to the land, beats to death, and swallows.

The female commonly makes her nest by the sides of rivers or brooks, in a hole made by the mole, or the water-rat: this she enlarges or contracts to suit her purpose; and it is conjectured, from the difficulty of

finding the nest, that frequently the hole which leads to it is under water. The eggs are clear white.

To notice the many strange and contradictory accounts of this bird, as well as of its nest, transmitted to us by the ancients,* and to enumerate the properties ascribed to it by the superstitious in all ages, would occupy too large a portion of this work: but the following modern instance seems worthy of notice:—

Dr. Heysham, of Carlisle, in his Catalogue of Cumberland Animals, says, "On the 7th of May, a boy from Upperby brought me a King-fisher alive, which he had taken when sitting on her eggs the night before: from him I received the following information:—Having often, this spring, observed these birds frequent a bank upon the river Peteril, he watched them carefully, and saw them go into a small hole in the bank. The hole was too small to admit his hand, but as it was made in the soft mould, he easily enlarged it. It was upwards of half a yard long; at the end of it the eggs, which were six in number, were placed upon the bare mould, there being not the smallest appearance of a nest."

* Their nests are wonderful—of the figure of a ball rather elevated, with a very narrow mouth; they look like a large sponge: they cannot be cut with a knife, but may be broken with a smart stroke: they have the appearance of petrified sea-froth. It is not discovered of what they are formed; some think of Prickly-back bones, since they live upon fish.—*Pliny.*

Aristotle compares the nest to a gourd, and its substance and texture to those sea-balls or lumps of interwoven filaments which are cut with difficulty; but, when dried, become friable.

Ælian and *Plutarch* describe it as being made to float on the placid face of the ocean.

King-fishers are not so numerous as might be expected from the number of eggs found in their nests, owing probably to the young being destroyed by the floods, which must often rise above the level of the holes where they are bred.

Except in the breeding season, this bird is usually seen alone, flying near the surface of the water with the rapidity of an arrow, like a little brilliant meteor, by which appearance the eye is enabled to follow its long-continued course. Considering the shortness of its wings, the velocity with which it flies is surprising.

Ornithologists inform us that King-fishers are found in almost every part of the globe; but it does not appear that more than this one species has ever been seen in Europe.

Of the Rail.

This genus, of which there is but one European species, is chiefly distinguished by the length of the bill, which exceeds considerably that of the head. It is besides slender, straight, or but slightly bent, compressed towards the base, cylindrical at the point; the upper mandible furrowed; nostrils lateral; legs and feet long, very little bare above the knee; three toes forward, and divided, and one behind, articulated with the tarsus.

Though there be several points of difference between this genus and that of the Gallinules, with which it has been commonly arranged, yet the transition from the one to the other is scarcely perceptible, by means of a great number of exotic species; the only obvious and assignable distinction being the length of the bill compared with that of the head. The sexes do not differ, but the young differ considerably from the old birds; the moult takes place in autumn, but it produces no change of colours.

THE WATER RAIL.

BILCOCK, VELVET OR BROOK RUNNER.

(*Rallus aquaticus*, Linn.—*Le Rale d'Eau*, Buff.)

This bird, though a distinct genus of itself, has many traits in its character very similar to both the Land Rail and the Spotted Rail: it is migratory, like the former, to which it also bears some resemblance in size, lengthened shape, and compressed body; its haunts and manner of living are nearly the same as those of the latter; but it differs from both in the length of its bill, and in its plumage. It weighs about four ounces and a half, and measures twelve inches in length, and sixteen in breadth. The bill is slightly curved, and one inch and three quarters long; the upper mandible dusky, edged with red; the under reddish orange; irides red. The top of the head, hinder part of the neck, the back, scapulars, coverts of the

wings, and tail, are black, edged with dingy brown; the ridge of the wings is white, the bastard wing barred with white, the inside barred with brown and white, and the quills and secondaries dusky; the side feathers are beautifully crossed with black and white, and slightly tipped with pale reddish brown. The inner side of the thighs, the belly, and the vent are pale brown, and in some specimens speckled with bluish ash. The sides of the head, the chin,* fore part of the neck, and the breast, are dark hoary lead colour, slightly tinged with pale rufous. The tail consists of twelve short black feathers, edged and tipped with dirty red; some of those on the under side barred with black and white. The legs, which are placed far behind, are a dull dingy red; toes long, and without any connecting membrane. Latham says, "the eggs are more than an inch and a half long, of a pale yellowish colour, marked all over with dusky brown spots, nearly equal in size, but irregular."

The Water Rail is a shy and solitary bird. Its constant abode is in low wet places, much overgrown with sedges, reeds, and other course herbage, among which it shelters and feeds in hidden security. It runs, occasionally flirting up its tail, through its tracts, with the same swiftness as the Land Rail runs through the meadows and corn fields, shews as great an aversion to taking flight as that bird, and has more of the means in its power of disappointing the sportman. It generally exhausts his patience, and distracts and misleads his dog, by the length of time to which it can protract

* The chin in some specimens is cream-coloured.

its taking wing; and it seldom rises until it has crossed every pool, and run through every avenue within the circuit of its retreats. It is, however, easily shot when flushed, for it flies but indifferently, with its legs dangling down. It is not very common in Great Britain, but is numerous in the marshes of the northern countries of Europe, whence, partially and irregularly, it migrates southward, even into Africa, during the severity of the winter season. Buffon says, "they pass Malta in the spring and autumn," and to confirm this, adds, "that the Viscount de Querhoënt saw a flight of them at the distance of fifty leagues from the coasts of Portugal on the 17th of April, some of which were so fatigued that they suffered themselves to be caught by the hand." The flesh of the Water Rail is not so generally esteemed as that of the Land Rail, and yet by many it is thought rich and delicious eating.

Of the Gallinule.

In this genus the bill is shorter than the head, compressed, conical; the upper mandible slightly curved, the lower forming an angle; the nasal cavity very large; nostrils lateral; feet and legs long, naked above the knee; fore toes long, divided, and furnished with a very narrow border or edging; body very much compressed throughout its whole length.

Like the Rails, these birds frequent fresh waters, swimming and diving with the same ease, and running on land with similar velocity. They feed likewise in the same manner, on insects and vegetable substances. They probably moult twice, but without undergoing any change of colours. The young differ greatly from the mature birds.

We have deemed it advisable to adopt Latham's mode of arranging these birds, by which means the Corn-crake, which was formerly placed amongst the Land Birds, now stands at the head of the Gallinules. This bird, though differing in some of its habits and manners from the Water Hens, yet so nearly resembles them in general structure and appearance, as not to allow of its being separated from the latter with propriety.

THE CORN-CRAKE.

LAND-RAIL.

(*Gallinula Crex*, Lath.—*Le Rale de Genet*, Buff.)

Length rather more than nine inches, body compressed. Bill light brown; eyes hazel; all the feathers on the upper parts of the plumage dark brown, edged with pale rust; both wing coverts and quills deep chesnut; fore part of the neck and the breast pale ash; a streak of the same colour extends over each eye from the bill to the side of the neck; belly yellowish white; sides, thighs, and vent marked with faint rusty-coloured bars: legs pale flesh-red.

The Land-Rail makes its appearance about the same time as the Quail, and frequents the same places, whence it is called, in some countries, the King of the Quails. Its well-known cry is first heard as soon as the grass becomes long enough to shelter it, and continues till the grass is cut; but the bird is seldom seen, for it constantly skulks among the thickest part of the herbage, and runs so nimbly through it, winding and

doubling in every direction, that it is difficult to come near it; when hard pushed by the dog, it sometimes stops short and squats down, by which means its too eager pursuer overshoots the spot, and loses the scent. It seldom springs but when driven to extremity, and generally flies with its legs hanging down, but never to a great distance: as soon as it alights, it runs off, and before the fowler has reached the spot, the bird is at a considerable distance.

The Corn-crake leaves this island before the winter, and repairs to other countries in search of its food, which consists principally of slugs, of which it destroys prodigious numbers; it likewise feeds on shell snails (helix nemoralis), worms, and insects of various kinds, as well as on seeds. It has no craw, but a wide pipe descending direct to the gizzard. It is very common in Ireland, and is seen in great numbers in the island of Anglesea in its passage to that country. On its first arrival in England, it is so lean as to weigh less than six ounces, from which one would conclude that it must have come from distant parts; before its departure, however, it has been known to exceed eight ounces, and is then very delicious eating. The female lays ten or twelve eggs, on a nest made of a little moss or dry grass loosely put together: they are of a pale ash colour, marked with rust-coloured spots. The young Crakes are covered with a black down; they soon find the use of their legs, for they follow the mother immediately after they have burst the shell.

The foregoing figure was made from a living bird, for which the work is indebted to the late Major H. F. Gibson.

THE SPOTTED GALLINULE, OR SPOTTED RAIL

(*Gallinula Porzana*, Linn.—*La Marouette*, Buff.)

Weighs above four ounces, and measures nearly nine inches in length, and about fifteen in breadth. Bill greenish yellow, and not more than three quarters of an inch long. Top of the head to the nape dusky, slightly streaked with rusty brown; a brown and white mottled stripe passes from the bill over and behind the eyes; cheeks and throat freckled dull grey. Neck and breast olive, marked with small white spots; sides dusky and olive, crossed with bars of white, and the under parts are a mixture of cinereous dirty white and yellow. The plumage of all the upper parts is dusky and olive brown, spotted, edged, barred or streaked with white; spots on the wing coverts surrounded with black, which gives them a studded or pearly appearance; and the white bars and streaks on the scapulars

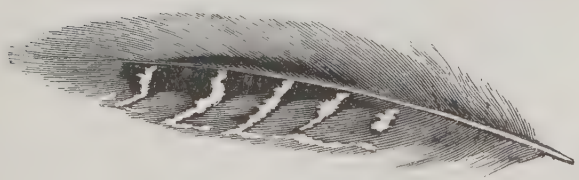
and tertials form a beautiful contrast with the black ground of the feathers on those parts. The legs are yellowish green. The Spotted Rail, in its figure and general appearance, though much less, is extremely like the Corn-crake or Land-Rail; but its manners and habits are very different. Its common abode is in low swampy grounds, in which are pools or streamlets, overgrown with willows, reeds, and rushes, where it lurks and hides itself with great circumspection: it is wild, solitary, and shy, and will swim, dive, or skulk under any cover; and will sometimes suffer itself to be knocked on the head, rather than rise before the sportsman and his dog. The species is very scarce in Great Britain, and from its extreme vigilance rarely to be seen. It is supposed to be migratory here, as well as in France and Italy, where it is found early in the spring: it is met with in other parts of Europe, but no where in great numbers. The conformation of its nest is curious: it is made of rushes and other light buoyant materials, woven and matted together, so as to float on, and to rise or fall with the ebbing or flowing of the water, like a boat; and to prevent its being swept away by floods, it is moored or fastened to the pendant stalk of one of the reeds, by which it is skreened from the sight, and sheltered from the weather. The female lays from six to eight eggs. The young brood do not long require the fostering care of the mother, but as soon as they are hatched, the whole of the little black shapeless family scramble away from her, take to the water, separate from each other, and shift for themselves. The flesh is said to have a fine and delicate flavour, and is esteemed by epicures a delicious morsel.

THE LITTLE GALLINULE.

(Gallinula Minuta, Mont.)

The above figure was taken from a stuffed specimen obligingly lent to this work by the Hon. H. T. Liddell, and the weight and length are quoted from Mr. Montagu's description, who treats of this bird as a hitherto undescribed species, under the title of Gallinula Minuta. We had, however, seen the bird some years ago: it was caught by the dogs of our friend, the late Major H. F. Gibson, in a boggy place, covered with reeds and rushes, near the Tyne; we had no opportunity at the time of taking either a drawing or description from it, but recollect its being somewhat more distinctly and beautifully spotted than the specimen now before us. The weight two ounces; length seven inches and three quarters; the bill five eighths of an inch long, yellowish green at the tip, and

dark green at the base; the nostrils pervious, and the brow and crown very little elevated above the bill; the head small; the crown and nape deep brown, the sides of the former, both above and below the eye, ash or slate colour; the cheeks and throat dull white; the fore part of the neck pale ash; the under parts, from the breast to the thighs inclusive, are a mixture of ash and pale brown; from thence to the vent is deep brown, spotted with white; the hinder part of the neck and shoulders olive brown; the middle of the back, down nearly to the rump, is striped with black, olive brown, and white, each feather being deeply margined on the outer webs with olive, the inner ones with white, and the middle with black; the quills are deep brown, with paler edges; the tail is short, and partakes of the colours just described; the legs and toes are green, the latter long, and the former bare three-eighths of an inch above the knees.



(Scapular Feather of the Spotted Gallinule.)

THE OLIVACEOUS GALLINULE.

Montagu figures and describes this bird, which he terms Gallinula Foljambei, from a specimen in the museum of F. Foljambe, Esq., of Osberton, as a species not before noticed. He also mentions another of the same kind being shot on the banks of the Thames, about the same time that Mr. Foljambe got his bird. According to his description, it differs chiefly from the Little Gallinule in being of a more plain plumage, being composed of deeper and lighter shades of cinereous olive brown, and in wanting the white spots and other markings of the latter bird, and being feathered nearer to the knees. Our drawing was made many years ago, from a preserved specimen in the Wycliffe Museum, but we did not then venture upon describing it as a new species, and it is only from such authorities as Mr. Foljambe and Mr. Montagu that the opinion is now adopted. No opportunity occurred of examining the under plumage of our bird, but the whole of the upper parts, from the head to the tail, were of a deep olive brown, with the middle of each feather more or less marked with a black or dusky spot.

THE COMMON GALLINULE.

WATER HEN, OR MOOR HEN.

(*Gallinula chloropus*, Lath.—*La Poule d'Eau*, Buff.)

The weight of this bird varies from ten and a half to fifteen ounces: the length from the tip of the beak to the end of the tail is about fourteen inches, the breadth twenty-two. The bill is rather more than an inch long, of a greenish-yellow at the tip, and reddish towards the base, whence a singular kind of horny or membraneous substance shields the forehead as far as the eyes: this appendage to the bill is as red as sealing wax in the breeding season; at other times it varies or fades into white. The head is small and black,

except a white spot under each eye; the irides red: all the upper parts of the plumage dark shining olive green, inclining to brown: under parts dark hoary lead grey: vent feathers black; those on the belly and the thighs tipped with dirty white: the long loose feathers on the sides, which hang over the upper part of the thighs, are black, streaked with white: the ridge of the wing, outside feathers of the tail, and those underneath, white: upper bare part of the thighs red; from the knees to the toes, the colours are different shades, from pale yellow to deep green: toes very long, the middle one measuring, to the end of the nail, nearly three inches: their under sides broad, being furnished with membraneous edgings, their whole length, on each side, by which the bird is enabled to swim, and easily run over the surface of the slimy mud by the sides of the waters, where it frequents.

The body of the Water Hen is long, and compressed at the sides, and the legs placed far behind; its feathers are thickly set, or compact, and bedded upon down. Like the Water-Rail, it lives concealed during the day among reeds and willows, by the sides of rivers or rivulets, which it prefers to bogs and stagnant pools: it can run over the surface of such waters as are thickly covered with weeds, and it dives and hides itself with equal ease; it flirts up its tail when running, and flies with its legs hanging down. In the evenings, it creeps, runs, and skulks by the margins of the waters, among the roots of bushes, oziers, and long loose herbage, in quest of its food, which consists of water insects, small fishes, worms, aquatic plants and seeds. It is likewise granivorous: if killed in September or October, after

having had the advantage of a neighbouring stubble, its flesh is very good.

They make their nest of a large quantity of withered reeds and rushes, closely interwoven, and are particularly careful to have it placed in a most retired spot, close by the brink of the water; and it is said the female never quits it without covering her eggs with the leaves of the surrounding herbage. Pennant and Latham say, she builds upon some low stump of a tree, or shrub, by the water's side: no doubt she may sometimes vary the place of her nest, according as particular circumstances may command, but she generally prefers the other mode of building it. She lays six or seven eggs at a time, and commonly has two hatchings in a season. The eggs are nearly two inches in length, and are irregularly and thinly marked with rust-coloured spots on a yellowish white ground. The young brood remain but a short time under the nurturing care of the mother; but as soon as they are able to crawl out, they take to the water, and shift for themselves.

Although the Water Hen is no where numerous, yet one species or other of them is met with in almost every country. It is not yet ascertained whether they ever migrate from this to other countries, but it is well known that they make partial flittings from one district to another, and are found in the cold mountainous tracts in summer, and in lower and warmer situations in winter.

On examination of several specimens of this bird, in full feather, they were found, like most birds of plain plumage, very little different from each other.

Of the Coot.

Bill strong, thick, sloping to a point; the base of the upper mandible rising far up into the forehead: both mandibles of equal length: nostrils inclining to oval, narrow, short: body compressed: wings and tail short: toes long, furnished with broad scalloped membranes between each joint, on each side; the inner toe has two, the middle three, and the outer four scallops: and the hinder toe, one plain membrane adhering to it its whole length. They moult once a year, but neither sex nor age makes much difference in the colour of the plumage.

The Coot is met with in various parts of the world. Its flesh is of a strong *marshy* taste; for which, by some people, it is much liked; while others, for the same reason, hold it in little estimation.

THE COOT.

BALD COOT.

(*Fulica atra*, Linn.—*La Foulque, ou Morrelle*, Buff.)

This bird generally weighs, when in full condition, about twenty-eight ounces, and measures fifteen inches in length. The bill is greenish-white, more than an inch and a quarter long: a callous white membrane, like that of the Water Hen, but larger, is spread over the forehead, which changes its colour to a pale red in the breeding season: irides red: the upper parts of its plumage black, except the outer edges of the wings, and a spot under each eye, which are white; under parts hoary dark ash or lead-colour. The skin is cloathed with a thick down, and covered with close fine feathers: thighs placed far behind, fleshy and strong, bare, and yellow above the knees: legs and toes commonly of a yellowish-green, but sometimes of a lead colour.

The Common Coot has so many traits in its character, and so many features in its general appearance like the Rails and Water Hens, that to place it after them seems a natural and easy gradation: Linnæus and other ornithologists, however, describe it as a genus distinct from those birds, and from the waders in general, on account of its being fin-footed, and its constant attachment to the waters, which, indeed, it seldom quits.—With it naturalists begin the numerous tribe of swimmers, and rank it among those that are the most completely dependent upon the watery element for their support: it swims and dives with as much ease as almost any of them: and also, like those which seldom venture upon land, it is a bad traveller, and may be said not to walk, but to splash and waddle between one pool and another, with a laboured, ill-balanced, and awkward gait.

These birds, like those of the preceding kinds, skulk and hide themselves, during the day, among rushes, sedges, and weeds, which grow abundantly in the loughs and ponds where they take up their constant abode: they rarely venture abroad, except in the dusk, and in the night, in quest of their food, which consists of the herbage, seeds, insects, and the slippery inhabitants of stagnant waters. It seldom happens that the sportsman and his dog can force the Coot to spring from its retreat; for it will, in a manner, bury itself in the mud rather than take wing, and when it is very closely pursued, and compelled to rise, it does this with much *flustering* and apparent difficulty.

This species is met with in Great Britain, at all seasons of the year, and it is generally believed that it does not migrate to other countries, but changes its stations,

and removes in the autumn from the lesser pools or loughs, where the young have been reared, to the larger lakes, where flocks assemble in the winter. They commonly build their nest in a bush of rushes, surrounded by the water:* it is composed of a great quantity of coarse dried weeds, well matted together, and lined within with softer and finer grasses: the female lays from twelve to fifteen eggs, and commonly hatches twice in a season; the eggs are about the size of those of a pullet, and are of a pale brownish white, sprinkled with numerous small dark spots, which, at the thicker end, seem as if they had run into each other, and formed larger blotches.

As soon as the young quit the shell, they plunge into the water, dive, and swim about with great ease; but they still gather together about the mother, take shelter under her wings, and do not entirely leave her for some time. They are at first covered with sooty-coloured down, and are of a shapeless appearance: while they are in this state, and before they have learned, by experience, to shun their foes, the Kite, Moor Buzzard, and others of the Hawk tribe, make dreadful havoc among them;† and this, notwithstanding the numerous brood, may account for the scarcity of the species.

* A Bald Coot built her nest in Sir William Middleton's lake, at Belsay, Northumberland, among the rushes, which were afterwards loosened by the wind, and, of course, the nest was driven about, and floated upon the surface of the water, in every direction; notwithstanding which, the female continued to sit as usual, and brought out her young upon her moveable habitation.

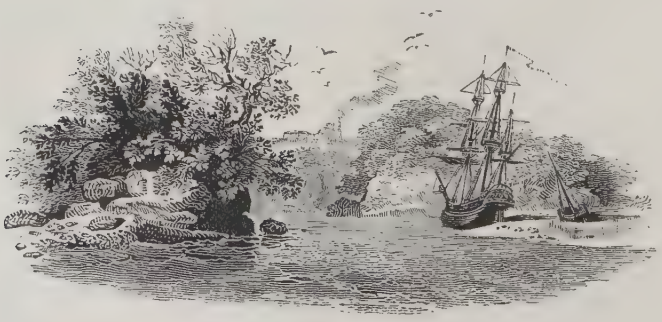
† The Pike is also the indiscriminate devourer of the young of all these water birds.

THE GREATER COOT.

(*Fulica aterrima*, Linn.—*La Grande Foulque, ou la Macroule*, Buff.)

"This is of a larger size than the last, but differs not in the colour of the plumage, except that it is blacker. *Brisson* distinguishes the two by the colour of the bare part of the forehead, which in this is white; and the garters, which are of a deep red.* This bird is said to be found in *Lancashire* and *Scotland*. It should seem to be a mere variety of the former, did not authors join in advancing the contrary. They are more plentiful on the continent, being found in *Russia* and the western part of *Siberia*, very common; and are also in plenty at *Sologne* and the neighbouring parts, where they call it *Judelle*. The people eat them on *maigre days*, and the flesh is much esteemed."—*Latham*.

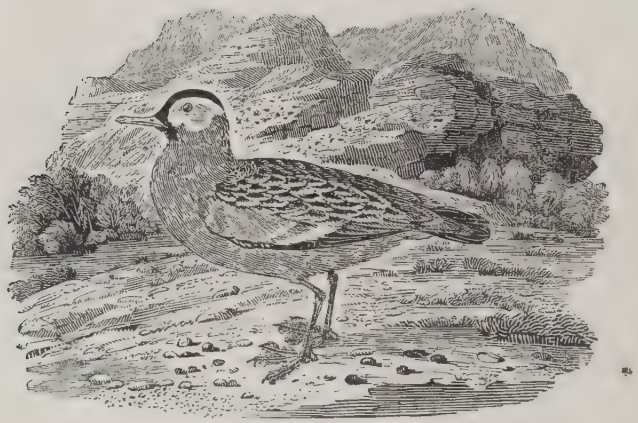
* "This can be no distinction, as birds differ in the colour of these parts according to the season."—*Latham*.



Of the Phalarope.

Bill straight and slender; nostrils minute; body and legs like the Sandpiper; toes three before and one behind, furnished with scalloped membranes.

This curious genus, in its external aspect, would seem to border closely on the Tringa family of the Waders, while in the form of its toes and in some of its habits, it approaches the true Swimmers. "They row on the watery element with admirable grace and rapidity, not dreading the waves, but swimming with equal facility in the open sea as in the lakes, preferring salt to fresh waters: on land they do not run very fast. They breed in the meadow grass close by the margins of lakes, and feed on small insects and sea-worms, which they pick up on the surface of the waves and along the shore. The moult, which takes place twice a-year, causes very considerable changes of plumage, and the young differ greatly from the old birds."—*Manuel d'Ornithologie.*



THE RED PHALAROPE.

(*Phalaropus hyperboreus*, Lath.—*Le Phalarope cendré*, Buff.)

This bird, in size and shape, is similar to the Grey Phalarope. Bill dull yellow, rather slender, somewhat flatted and bent down a little at the tip; crown of the head and throat black; the sides of the head white; neck, breast, belly, and vent ferruginous, with vinous reflections; the back feathers dusky in the middle; webs reddish yellow; lesser coverts of the wings dark ash, slightly edged with white; the greater, the same, but more deeply tipt, and these form an oblique double bar across the closed wings; the tertials are black, with light edges and tips; the primaries and tip of the tail are also black; legs, toes, and scalloped webs, dingy yellow.

These birds are natives of the northern regions; Mr. Bullock met with several in the Orkney Isles.

THE GREY PHALAROPE.

COOT-FOOTED TRINGA, OR SCALLOP-TOED SANDPIPER.

(*Phalaropus Lobatus*, Lath.—*Le Phalarope à festons dentelés*, Buff.)

The bill is nearly an inch long: the upper mandible is dusky horn colour, grooved on each side, and flatted near the tip; the under one is orange towards the base. The eyes are placed high in the head, with a dark patch underneath each, and the same on the hinder part of the head and neck. The shoulder and scapular feathers are fine lead-grey, edged with white: fore part of the head, throat, neck, and breast, white: belly also white, but slightly dashed with pale rust: greater coverts broadly tipped with white, which forms an oblique bar across the wings, when they are closed: some of the first and secondary quills are narrowly edged with white: on the middle of the back the feathers are

brown, edged with bright rust: on the rump there are several feathers of the same colour, but mixed with others of white, rufous, and lemon. The wings are long, and, when closed, reach beyond the tail: the primary quills are dusky, the lower part of their inner sides white: secondaries tipped with white: tail dusky, edged with ash: legs black. The scalloped membranes on its toes (in our specimen) differed from those of the Red Phalarope, in being finely serrated on their edges.

This bird is a native of the northern regions of Europe, Asia, and America, and migrates southward in the winter. It has seldom been met with in any part of the British Isles. Ray, however, saw one at Brignal, in Yorkshire; and Pennant mentions one which was shot in the same county; Mr. Tunstall another, shot at Stavely, in Derbyshire;—and the specimen from which this drawing and description were taken, was shot near the city of Chester, by Lieutenant-Colonel Dalton, of the 4th regiment of Dragoons, on the 14th of October, 1800.

Captain Sabine mentions in his "Memoir of the Birds of Greenland," that on the 10th of June, in latitude 68°, four miles from land, a flock of these birds was seen swimming in the open sea amongst some icebergs.

THE RED-NECKED PHALAROPE.*

(*Phalaropus Fuscus*, Lath.—*Le Phalarope Brun*, Brisson.)

Bill an inch long, flatted, and black at the tip; rest of both mandibles orange-coloured; head capped with dusky-brown, extending from the bill to the hinder part; throat and about the corners of the mouth, also of the same colour, but paler, and inclining to ash: cheeks and sides of the head white, which, meeting at the nape of the neck, gradually deepens into ash and dusky-brown towards the shoulders; the latter, with the scapulars and tail coverts, are black, tipped, bordered, and striped with pale rusty-yellow; middle of the back, and the lesser and greater coverts dusky ash, the latter tipped with white; tertials and the exterior webs of the quills dusky; but the greater part of the inner webs of the latter are pale ash, fading into white: the tail consists of twelve feathers; the two middle ones,

* Montagu entertains some doubts as to there being three distinct species of Phalaropes; and later writers enumerate only two.

which are the longest, are plain dusky brown, the rest taper off in length, and turn lighter-coloured as they shorten, and are margined on the outer webs with pale rusty-yellow and white; the whole of the under parts, from the throat to the end of the vent feathers, are deep reddish-chesnut, with vinous reflections; legs and toes yellowish, and scalloped like those of the Grey Phalarope, but the middle claws, which are short, hooked, and sharp, are both turned outward. The above description was taken from a male bird brought from Davis' Straits, where they are pretty numerous, about the mouth of Hudson's river. Although they are very fat and plump, they are extremely active, and swim about nimbly in quest of their food, which consists chiefly of the slimy substance called whale's food, so frequently seen floating on the surface of the waters of the northern seas. They are occasionally met with on the British shores.

The author was furnished by Mr. Charles Fothergill, with two stuffed specimens, male and female, and the eggs of these birds. The above figure was taken from the former. It differs in its plumage from the Red Phalarope; its head, and a narrow stripe on the front, another on the hinder part of the neck, which last spreads over the shoulder, were dark ash; throat white; sides of the neck and breast brilliant bay colour; upper parts of the plumage deep brown, nearly black; under parts white. The bird must have been improperly dried in the stuffing, as its bill and scalloped toes seemed much shrivelled up. The eggs, four in number, like those of others of this genus, were large; they were of a dingy-olive, blotched and spotted with brown.

Of the Grebes.

The bills of this genus are compressed on the sides, and, though not large, are firm and strong, straight and sharp-pointed: nostrils linear: a bare space between the bill and the eyes: tongue slightly cloven at the end: body depressed: feathers thickly set, compact, very smooth and glossy: wings short; scapulars long; no tail: legs placed far behind, much compressed, or flatted on the sides, and serrated behind with a double row of notches; toes furnished on each side with membranes; inner toes broader than the outer; the nails broad and flat.

This genus is ranked by Ray and Linnæus with the Diver and Guillemot; but as the Grebes differ materially from those birds, Brisson, Pennant, and Latham have separated them, an arrangement which it will be seen we have adopted.

The Grebes are almost continually upon the water, where they are remarkable for their agility: at sea they seem to sport with the waves, through which they dart with the greatest ease, and, in swimming, slide along as it were, without any apparent effort, upon the surface, with wonderful velocity; they also dive to a great depth in pursuit of their prey. They frequent fresh-water lakes and inlets of rivers, as well as the ocean, to which they are obliged to resort in severe seasons, when the former are bound up by the ice. No cold or damp can penetrate their thick close plumage, which looks as if it were glazed on the surface, and by which they are enabled, while they have open water, to brave

the rigours of the coldest winter. They can take wing from the water, or drop from an eminence, and fly with great swiftness to a considerable distance; but when they happen to alight on the land, are very helpless, for they cannot either rise from the flat surface of the ground, or make much progress in walking upon it. On shore, they sit with the body erect, commonly upon the whole length of their legs, and, in attempting to regain the water, they awkwardly waddle forward in the same posture; and if, by any interruption, they happen to fall on the belly, they sprawl with their feet, and flap their short wings as if they were wounded, and may easily be taken by the hand, for they can make no other defence than by striking violently with their sharp-pointed beak. They live upon fish, and also upon fresh-water roots and sea-weeds. They are commonly very fat, and heavy in proportion to their size.

They generally build their nests in the holes of the rocky precipices which overhang the sea-shores; and those which breed on lakes make theirs of withered reeds, rushes, &c., and fix it among the growing stalks of a tuft or bush of such like herbage, close by the water's-edge. The female lays from two to four eggs at one hatching. They moult in autumn, but the young birds require from two to three years before they assume the fixed plumage of the old birds, a circumstance which has given rise to the multiplication of species in the genus. The sexes differ very little. The skins of these birds are dressed with the feathers on, and made into warm beautiful tippets and muffs: the under part only is used for this purpose; and a skin of one of the species sells as high as fourteen shillings.

THE GREAT-CRESTED GREBE.

GREATER-CRESTED DOUCKER, CARGOOSE, ASH-COLOURED LOON, OR GAUNT.

(*Podiceps cristatus*, Lath.—*La Grêbe cornu*, Buff.)

This is the largest of the Grebes, weighing about two pounds and a half, and measuring twenty-one inches in length, and thirty in breadth. The bill is about two inches and a quarter long, dark at the tip, and red at the base: the bare stripe, or lore, between the bill and the eyes, is, in the breeding season, red, but afterwards changes to dusky: irides, fine pale

crimson. The head is furnished with a great quantity of feathers, which form a kind of ruff,* surrounding the upper part of the neck; those on each side of the head, behind, are longer than the rest, and stand out like ears: this ruff is of a bright ferruginous colour, edged on the under side with black. The upper parts of the plumage are of a sooty or mouse-coloured brown; under parts glossy or silvery white; the inner ridge of the wing is white; the secondaries the same, forming an oblique bar across the wings, when closed: the outside of the legs is dusky, the inside and toes pale green.

This species is common in the fens and lakes in various parts of England, where they breed and rear their young. The female conceals her nest among the flags and reeds which grow in the water, upon which it is said to float, and that she hatches her eggs amidst the moisture which oozes through it. It is made of various kinds of dried fibres, stalks and leaves of water plants, and (Pennant says) of the roots of bugbane, stalks of water-lily, pond-weed, and water-violet: when it happens to be blown from among the reeds, it floats about upon the surface of the open water.

These birds are met with in almost every lake in the northern parts of Europe, as far as Iceland, and southward to the Mediterranean; they are also found in various parts of America.

* The greater number of the Grebes, when in full plumage, are provided (without distinction of sex,) with feathers forming a crest or ruff.

THE TIPPET GREBE.

GREATER DOBCHICK, OR GREATER LOON.

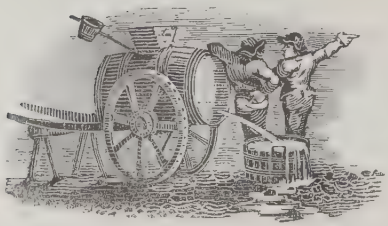
(*Podiceps Urinator*, Lath.—*Le Grêbe, et Le Grêbe huppé*, Buff.)

This bird differs from the last only in being somewhat less, in having its neck, in most specimens, striped downward on the sides with narrow lines of dusky and white, and in having no crest.

Modern ornithologists are now of opinion, that the Tippet Grebe is the female of the Great-crested Grebe, or a young bird of that species. Latham says, "It is with some reluctance that we pen our doubts concerning the identity of this, as a species, at least as being distinct from the Great-crested Grebe, in contradiction to what former authors have recorded on the subject. It is certain that the last-named bird varies exceedingly at different periods of life; and we are likewise as cer-

tain that the birds which have been pointed out to us as the Geneva Grebes, have been no other than young ones of the Great-crested, not having yet attained the crest; and whoever will compare Brisson's three figures of the birds in question, will find (the crest excepted) that they all exactly coincide, allowing for their different periods of age. We have been further led into this opinion from the circumstance of a large flock of them, which appeared in various parts of the shores of the Thames, from Gravesend to Greenwich, last winter, many of which were killed, and came under our inspection: among them we found the greatest variety about the head, from being perfectly without a crest, to the most complete one, with all the intermediate stages above-mentioned."

In the progress of this work, the author has been favoured, by sporting friends, with several of these birds, which differed from each other in the manner described by Latham, and induced him to adopt the opinion of that gentleman concerning them.



THE EARED GREBE,

EARED DOBCHICK,

(*Podiceps auritus*, Lath.—*Le petit Grèbe huppé*, Buff.)

Measures about thirteen inches in length, and twenty-two from tip to tip of the wings, and weighs nineteen ounces. The under mandible, towards the base, is red, the rest of the bill black, with white tips; it measures, on the upper ridge, scarcely an inch: lore and irides red: the head is thickly set and enlarged with feathers of a sooty black, except two large, loose, and spreading orange-coloured tufts, which take their rise behind each eye, flow backward, and nearly meet at their tips: the neck and upper parts of the plumage are black; the under parts glossy-white: the sides rusty-chesnut: legs greenish-black. The male and female are nearly alike, only the latter is not furnished or puffed up about the head with such a quantity of feathers.

This species is not numerous in the British Isles. Pennant says, they inhabit and breed in the fens near Spalding, in Lincolnshire, and that the female makes a nest not unlike that of the Crested Grebe, and lays four or five small white eggs. The Eared Grebe is found in the northern regions of Europe, as far as Iceland, and is also met with in southern climates. The circumnavigator Bougainville says, it is called "The Diver with Spectacles," in the Falkland Islands.

THE DUSKY GREBE,

BLACK AND WHITE DOBCHICK,

(*Podiceps obscurus*, Lath.—*Le Petit Grêbe*, Buff.)

Measures about an inch less in length, and two in breadth, than the last. The bill is more than an inch long, pale blue, with reddish edges: lore and orbits red: irides bright yellow; upper part of the head, hinder part of the neck, scapulars, and rump, dark sooty, or mouse-coloured brown: feathers on the back nearly of the same colour, but glossy, and with greyish edges: ridge of the wings and secondary quills white; the rest of the wing dusky. There is a pale spot before each eye; cheeks and throat white: fore part of the neck light brown; and the breast and

belly white and glossy, like satin: thighs and vent covered with dirty white downy feathers: legs white behind, dusky on the outer sides, and pale blue on the inner sides and shins: the toes and webbed membranes are also blue on the upper sides, and dark underneath.

This description was taken from a very perfect bird, caught on Sand Hutton Car, near York, on the 28th of January, 1799, by the Rev. C. Rudston: other specimens of this species have differed in the shades of their plumage and colour of the bill: in some the upper mandible is yellow, from the nostrils to the corners of the mouth, and the under one entirely of that colour.

THE RED-NECKED GREBE.

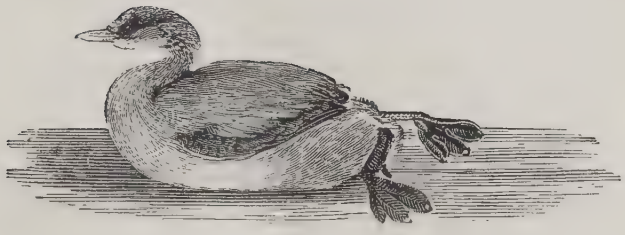
(*Podiceps Rubricollis*, Lath.—*Le Jougris*, Buff.)

This bird measures, from the bill to the rump, seventeen inches, to the end of the toes twenty-two, and weighs about eighteen ounces and three-quarters. The bill is about two inches long, dusky or horn-coloured on the ridge and tip, and, on the sides of it, towards the corners of the mouth, reddish-yellow; under side of the lower mandible also of the latter colour: lore dusky: irides dark-hazel: cheeks and throat dirty or greyish white: upper part of the head black, with a greyish cast; the feathers are lengthened on each side on a line with the eyes backward, so as to look like a pair of rounded ears; these it can raise or depress at pleasure: the fore part and sides of the neck are of a dingy-brown, mixed with feathers of a bright rusty-red: the upper parts of the plumage are darkish mouse-coloured brown, lightest on the wing coverts, deepest on the scapulars and rump, and edged with grey on the shoulders; under parts glossy-white, like satin, mottled with indistinct brownish spots: primary quills

brownish tawny, with dark-coloured tips; secondaries white; outer sides of the legs dusky, inner sides sallow-green; webs of the outer toes flesh-colour, middle ones red, and the inner ones orange.

Pennant supposes this bird to be only a variety of the Great-crested Grebe; but Latham and other ornithologists are of opinion that it is a distinct species.

The foregoing figure and description were taken from a specimen the gift of George Silvertop, of Minster-acres, Northumberland, Esq., January 16th, 1802.



THE LITTLE GREBE.

DOBCHICK, SMALL DOUCKER, DIPPER, OR DIDAPPER.

(*Podiceps minor*, Lath.—*Le Castagneux*, Buff.)

This is the least of the Grebe tribe, weighing only between six and seven ounces, and measuring to the rump ten inches, to the end of the toes thirteen, and about sixteen from tip to tip of the wings. The bill is scarcely an inch long, of a dusky reddish colour: irides hazel; head thickly clothed with downy soft feathers, which it can puff up to a great size, or lay down flat at pleasure: cheeks mostly bay, fading towards the chin and throat into a yellowish white. Neck, breast, and all the upper part of the plumage, brown or chesnut, tinged with red, lightest on the rump: belly white, clouded with ash, mixed with red: thighs and vent grey: greater quills dark brown; the lesser white on their inner webs: legs dirty olive green.

The little Grebe is a true aquatic, for it seldom quits the water, nor ventures beyond the sedgy margins of the lake where it has taken up its abode. It is a most excellent diver, and can remain a long while under

water, in pursuit of its prey, or to shun danger. It is found in almost every lake, and sometimes upon rivers, but seldom goes out to sea. Its food is of the same kind, and its habits much the same as those of the other Grebes.

Ornithologists and sportsmen describe the nest of this bird as being of a large size, and composed of a very great quantity of grass and water plants, at least a foot in thickness, and so placed in the water, that the female hatches her eggs amidst the continual wet, in which they were first laid: and it is conjectured that the natural warmth of her body occasions a fermentation of the herbage, which greatly aids the incubation. She lays from four to six eggs, of a yellowish dull white, and is said to cover them up with the surrounding leaves, every time she has occasion to stir abroad.

This species of the Grebe is an inhabitant of both Europe and America. In several specimens furnished by the author's sporting friends, the difference was very trifling, except that the plumage of some was more dashed with red than that of others.

THE BLACK-CHIN GREBE.*

(Podiceps Hebridicus.)

This bird is described as being larger than the last. "Chin black: fore part of the neck ferruginous: hinder part mixed with dusky: belly cinereous and silver intermixed. Inhabits Tiree, one of the Hebrides."—*Latham.*

* Montagu regards this as a variety of the Little Grebe.

Of the Auk, or Penguin.

Bill strong, thick, convex, compressed on the sides: nostrils linear, placed parallel to the edge of the bill, and near it: tongue almost as long as the bill: toes, three in number, all placed forwards, and completely webbed.

They are seldom seen on shore, unless during the breeding season. No well-marked difference is observable between the sexes. The moult takes place twice a-year. They generally nestle, and live much like the Guillemots.

THE GREAT AUK.

NORTHERN PENGUIN, OR GAIR-FOWL.

(*Alca impennis*, Linn.—*Le Grand Pingouin*, Buff.)

The length of this bird, to the end of the toes, is three feet. The bill is black, and four inches and a quarter long; both mandibles are crossed obliquely with several ridges and furrows, which meet at the edges. Two oval-shaped white spots occupy nearly the whole space between the bill and the eyes: the head, back part of the neck, and all the upper parts

of the body and wings are covered with short, soft, glossy black feathers, excepting a white stroke across the wings, formed by the tips of the lesser quills: the whole under side of the body is white: the wings are very short, not exceeding four inches and a quarter from the tips of the longest quill feathers to the first joint: legs black, short, and placed near the vent.

From the difficulty with which these birds fly or walk, they are seldom seen out of the water, and it is remarked by seamen, that they never wander beyond soundings. The female is said to lay only one egg, which she deposits and hatches on a ledge close to the sea-mark: it is of a very large size, being about six inches in length, of a white colour, streaked with lines of a purple cast, and blotched with dark rusty spots at the thicker end.

This species is not numerous any where: it inhabits Norway, Iceland, the Ferro Isles, Greenland, and other cold regions of the north, but is seldom seen on the British shores.

The Gair-fowl described by Martin, in his voyage to St. Kilda, and account of that island, published in 1698, differs in some particulars from the foregoing: he says, "it is larger than the Solan Goose, black, red about the eyes, has a large white spot under each eye, a long broad bill; stands erect: has short wings; cannot fly; lays one egg, twice the size of that of the Solan Goose, variously speckled with black, green, and dusky spots."

THE RAZOR-BILL.

AUK, MURRE, FALK, MARROT, OR SCOUT.

(*Alca Torda*, Linn.—*Le Pingouin*, Buff.)

The wings of this species are more furnished with feathers, and longer in proportion to the size of the bird, than those of the last: they measure, extended, about twenty-seven inches: the length of the bird, from bill to tail, is eighteen. The bill is black, strong, curved towards the point, and sharply edged; the upper mandible is crossed with four transverse grooves, and the under one with three, the broadest of which is white, and forms a band across them both: the inside of the mouth is yellow: the base of the bill is covered with feathers a great way forward, upon which, on each side, is placed a singular, narrow, white streak, which passes to the corner of the eye; another white stripe or bar, formed by the tips of the lesser quills, crosses each wing obliquely: the upper part of the

head, hinder part of the neck, back, rump, and tail coverts are of a soft glossy black, and look something like velvet: the cheeks, chin, and throat are of a dull sooty dark brown; ridge and pinions of the wings, light brown: coverts and quills dusky: legs black.

These birds associate with the Guillemots, and also breed in the same places. About the beginning of May, they take possession of the highest impending rocks, for the purpose of incubation, and upon the ledges of these rocks they congregate in great numbers, sitting closely together, tier above tier, and row above row: there they deposit their single large egg on the bare rock; and notwithstanding the numbers of them, thus mixed together, yet no confusion takes place, for each bird knows her own egg, and hatches it in that situation.

It has often excited wonder, that as the eggs have no nest or bedding to rest upon, they are not rolled off into the sea by gales of wind, or upon being touched by the birds: it is also said, that if they are removed by the human hand, it is impossible, or at least extremely difficult, to replace them in their former steady situation. This is accounted for by some ornithologists, who assert that the egg is fixed to the spot upon which it is first laid, by a glutinous limy substance with which the shell is covered, and which keeps it firmly in its place until the young is produced. The egg of this Auk is three inches long, of a greenish white colour, irregularly marked with dark spots. They are gathered, with other kinds, in great numbers, by the neighbouring inhabitants, from the rocky promontories in various parts of the British isles, but particularly

in the north, where the men who are accustomed to gather these eggs, are let down over the precipices by ropes, which are tied to, or held by, their companions above.

The foregoing figure and description were taken from a specimen in perfect plumage, shot at Jarrow Slake, near the mouth of the Tyne, in May, by the late Mr Thomas Walton, of Farnacres, to whose memory, for many favours of the same kind, the author feels a large debt of gratitude.

THE BLACK-BILLED AUK.*

(*Alca Pica*, Linn.—*Le Petit Pingouin*, Buff.)

Weighs from sixteen to twenty ounces, and measures in length from fifteen to sixteen inches, and in breadth from twenty-four to twenty-eight. The bill is black, compressed, and slightly ridged and furrowed on the sides, but more or less so in different subjects, and some of them have a white line across each mandible, while others have the bill nearly quite plain and smooth; an indistinct white line extends from the upper mandible to the eye, behind which are a mixture of dark brown and dirty white feathers, obscurely divided to the hinder part of the head; the inside of the mouth is yellow; irides hazel; the upper part of the head, and a streak below each eye, are black, as are also the

* Temminck says it is the young of the Razor-Bill.

whole of the upper parts of its silky plumage, including the wings and the tail, excepting the tips and the secondary quills, which are white: all the under parts, from the chin to the vent, are also white; the legs black. From the similarity in some of the markings of these birds, and of the Razor-bill and Foolish Guillemot, ornithologists have been led to consider them as varieties of the same species; but this opinion Montagu combats with apparent success. He has treated largely on this subject, and is satisfied that they are distinct species. The Razor-bills and Foolish Guillemots mostly leave the arctic regions to breed and rear their young in more southern climes, and for that purpose, in the summer months, are seen in flocks of immense numbers, on the rocky promontories and isles of the British shores, which they leave in the autumn. The Black-billed Auks and lesser Guillemots, on the contrary, remain to breed, also in immense numbers, in Iceland, Greenland, &c., in the continued day-light of summer, and disperse southward on the approach of the winter cold and darkness of the frigid zone.

THE PUFFIN.

MULLET, COULTERNEB, SEA-PARROT, POPE, OR WILLOCK.

(*Alca Arctica*, Linn.—*Le Macareux*, Buff.)

The Puffin weighs about twelve ounces, and measures twelve inches in length, and twenty-one in breadth. Its singular bill looks not unlike a kind of sheath slipped over both mandibles, and, from its appearance, the bird is not improperly named Coulterneb, or Knife-bill. At the base, where it is about an inch and a half in depth, it is rimmed with a white callous border, the two corners of which project above the brow, and below the chin. It is about the same in length, curved towards the point, compressed vertically, very flat, and transversely furrowed on the sides; the half of it adjoining to the head is smooth, and of a

fine lead-coloured blue; the other part, to the tip, red: the nostrils are placed in long narrow slits, near the edge of the bill: the corners of the mouth, when closed, are curiously puckered, and form a kind of small star, or rose: the eyes are protected by small callous protuberances, both above and below: the edges of the eyelids are crimson: irides grey: the chin and cheeks are white, bordered with grey, the latter much puffed up with feathers, which make the head look large and round. From behind the corner of each eye, the feathers are curiously separated, forming a narrow line, which reaches to the hinder part of the head: the crown of the head, hinder part of the neck, and upper part of the plumage are black, and a collar of the same colour encircles the neck: the under parts are white: the tail consists of sixteen feathers: the legs are reddish orange.

The Puffin, like others of the same genus, though it takes wing with great difficulty, can fly with rapidity. It walks upon the whole length of the leg and foot, with a wriggling awkward gait. In tempestuous weather, it takes shelter in caverns and holes in the nearest rocks, or in those made by the rabbit on the beach, among the *bent* grass, in which it sits dozing, in snug security, till the return of calm weather; for these birds cannot brave the storm, and it is not uncommon, when they have been overtaken by it, to find them drowned, and cast on shore. Various kinds of fish, such as small crabs, shrimps, sprats, and also sea-weeds, are said to be the food upon which they live; but it is evident, from the structure, great strength, and sharpness of the bill, that they are furnished with powers to crush

and pluck out other kinds of shell-fish, which ornithologists have not noticed.

The female makes no nest; she deposits her single whitish-coloured egg upon the bare mould, in a hole dug out and formed in the ground, by her mate and herself, for that purpose; or in those that they find ready made by the rabbits, which they easily dislodge. The parent birds are very attentive to their young, which they will defend to the last, by severely biting whatever enemy attempts to molest them, and will suffer themselves to be taken rather than desert them: and yet, notwithstanding this uncommon attachment, when the day of migration comes, the young ones, which are not able to fly, are left behind, and mostly perish of want, or are destroyed by birds of prey.

The bite of these birds is very severe: one sent to the author, in a box covered with netting, caught hold of the finger of a poor man, and brought away the fleshy part of it, as if it had been cut out with a knife: but they may be tamed, and soon become familiar. They are fed on fish and other animal substances.

These birds are spread over various parts of the northern world, and are met with on almost all the rocky cliffs on the coasts of Britain and Ireland, and on many of the surrounding isles, in immense numbers. They congregate in flocks of a magnitude regulated by the accommodations afforded them at their breeding places, at which they first assemble early in April, but do not settle to prepare for the business of incubation till May. They hatch their young in the beginning of July; from which time until nearly the middle of August, they are employed in nurturing and

rearing their brood: when this is accomplished, the whole associated swarm leaves the place at once, and pursues its route to other regions, more suited to their future exigencies, there to spend the remainder of the varied year.

The foregoing figure and description were taken from a perfect specimen of an old bird, the present of Mrs. Cheney, late Miss Harriot Carr, of Dunston Bank; and on comparing it with several others, it appeared evident that their bills increase in size with their age.

THE LITTLE AUK.

LITTLE BLACK AND WHITE DIVER.

(*Alca alle*, Linn.—*Le petit Guillemot*, Buff.)

This plump round-shaped bird measures about nine inches in length. The bill is black, short, thick, strong, and convex; it is feathered from the corners of the mouth half way forward towards the point. The crown of the head is flat and black; all the upper parts of the plumage are of the same colour, except a narrow bar of white, formed by the tips of the lesser quills across the wings, and the scapulars, which are streaked downwards with the same;* the cheeks and under parts are white: legs and toes yellowish; webs dusky.

* Some specimens have a white spot below each eye.

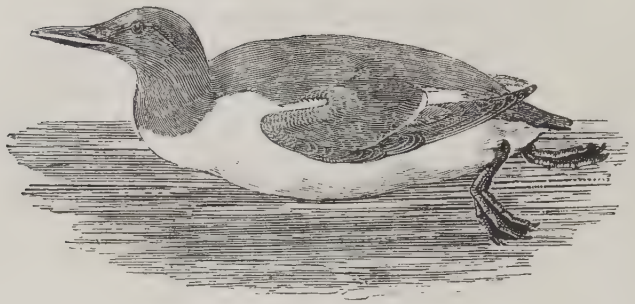
These birds are inhabitants of Spitzbergen and Greenland, and are also met with at Newfoundland, where they are called Ice Birds. Captain Sabine says, "it is not common in the Polar Sea; its great breeding station is in the northern part of Baffin's Bay." They are rare visitants of the British Isles. That from which the above figure and description were taken, was caught alive on the Durham coast, and was, for a short time, fed with grain.

Of the Guillemot.

The bills of this genus, though of a slender shape, are firm, strong, and pointed: the upper mandible slightly bending towards the end: base covered with soft short feathers: nostrils lodged in a hollow near the base: tongue slender, almost the length of the bill: thighs placed in the abdomen: no back toe.

Some of the Guillemots appear to be very stupid, not becoming cautious from experience, like many other kinds, but suffering themselves repeatedly to be shot at, as if they did not know the danger; for notwithstanding they have seen their associates drop at every fire, they still continue to wheel about in the same circle, and to alight again on the same place where they were first disturbed. Others, however, are sufficiently alert. They use their wings when under water.

These birds are numerously spread over various parts of the northern world, whence they are driven by the approach of winter to seek more temperate climes. At that season they arrive on the British shores, where they remain until they have reared their young.



THE FOOLISH GUILLEMOT.

WILLOCK, SKOUT, KIDDAW, LAVY, SEAHEN, OR STRANY.

(*Uria Troile*, Lath.—*Le Guillemot*, Buff.)

This Guillemot is a plump heavy bird in proportion to its size, weighing about twenty-four ounces, and measuring only seventeen inches in length, and twenty-seven and a half in breadth. Bill bluish-black, about two inches and three quarters long, from the tip to the corners of the mouth, the inside of which is yellow: both mandibles slightly notched near their points: irides hazel: from each eye to the hinder part of the head, a narrow line is formed by a singular division of the feathers, which here, as well as on the head and neck, are close and smooth, and of a dull dusty mouse-colour; the back, wings, and tail are nearly the same, but have a lead-coloured cast: the tips of the lesser quills, the breast, belly, and vent, are white: legs dusky and brown: nails black.

The female lays only one egg, which is large in proportion to her size, being about three inches in length: they are not all alike; those of one bird being of a whitish ground, and of another, perhaps, pale blue, or pale sea-green, and all of them are curiously and irregularly spotted and streaked with black.

These birds associate with and breed in the same places as the Razor-bill: they are, in many places, indiscriminately called Willocks.

THE LESSER GUILLEMOT.

MARROT.

(*Uria minor*, Lath.)

This species weighs about nineteen ounces, and measures in length sixteen inches, and in breadth twenty-six. The bill is shaped like that of the last, and is about two inches and a half long: the stroke formed by the divided feathers behind the eye, is dusky, on a white ground: the cheeks, fore part of the neck and the breast, tips of the secondary quills, and the whole of the under parts, are white, except a few dull spots on the auriculars, and some freckles on the breast; the front and crown of the head, back of the neck, and the whole of the upper parts, are dusky, inclining to lead colour: the legs and feet dusky, blushed with red.

Some naturalists suspect that the Lesser Guillemot is only the young of the foregoing species; but this is not yet ascertained, neither is it known where they breed.* They, however, seldom associate with the Guillemots that breed on the British shores, which they visit only during the winter season, and almost all of them retire northward in the spring.

The bird from which the above drawing and description were taken, was caught alive at Tynemouth, in the latter end of September, 1801: the tide had left it in a situation surrounded by rocks, upon the flat sand, from which it could not raise itself to take flight. While the drawing was making, it sat under a table trimming its feathers, and appeared perfectly at ease, and not the least alarmed at the peeping curiosity of the children who surrounded it. When this business was finished, it was taken and set down upon an open part of the shore, where it immediately began to waddle towards the water, with the whole leg and foot extended on the ground; and as soon as it reached its beloved element, it flapped its wings, darted through the surge, dived, and disappeared.

* Montagu says they are a distinct species; that they breed in the arctic regions, and disperse southward in the autumn.

THE BLACK GUILLEMOT.

GREENLAND DOVE, SEA-TURTLE, OR TYSTE.

(*Uria Grylle*, Lath.—*Le petit Guillemot noir*, Buff.)

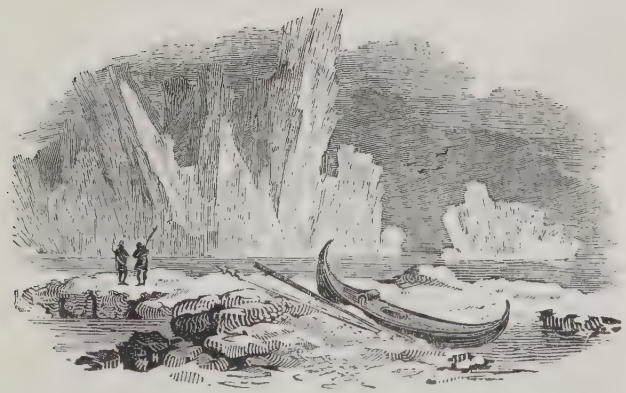
Length about fourteen inches, breadth twenty-two, weight fourteen ounces. Bill black, slender-shaped, and pointed; the upper mandible slightly bent at the point: inside of the mouth red. The whole plumage is sleek and glossy, and of a sooty-coloured black, excepting a large patch of white on the coverts of each wing: its feathers appear all unwebbed, and look like silky hair: legs and feet red: claws black. In some the whole plumage is black; in others the lesser quills are tipped with white; and all those that remain in the northern climates are said to turn white in winter.

These birds are met with in the North Sea, in Greenland, Spitzbergen, Iceland, the Ferro, Orkney, and Zetland Islands; in the latter they are known to breed in considerable numbers. The nest is made in the deep

crevices of the rocks which overhang the sea: the eggs are of a grey colour: some assert that the female lays only one, and others, with more probability, that she lays two. They commonly fly in pairs, and so low that on being flushed they raise the surface of the sea by the flapping of their narrow wings. This is a sprightly active bird.

The Greenlanders eat the flesh, and use its skin for clothing, and the legs as a bait for their fishing lines. Willoughby, Ray, Albin, and Edwards have named it the Greenland Dove, or Sea Turtle. In the Orkney Islands it is called the Tyste or Puffinet.

The foregoing figure was taken from a drawing presented to the author.



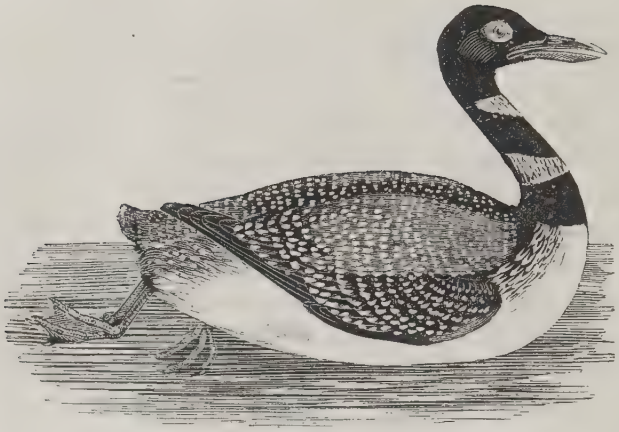
THE SPOTTED GUILLEMOT.

This is a variety (supposed to be the young) of the last species, which the author has not seen. It is thus described by Latham:—"In this the plumage is in patches of white and black on the upper parts, and all beneath white. In Brunnich's bird the belly was spotted black and white: he supposed it to be a bird of the first year."

Latham enumerates several other varieties of this genus of birds, but as they have not been observed to visit the British Isles, they do not come within the scope of this work. There are, however, others which are occasionally met with in this country, but whether the differences may not be owing to age or sex, is not yet ascertained. One of these, presented in October, 1802, by the Rev. H. Cotes, of Bedlington, differed from the Lesser Guillemot in its bill being much shorter, measuring only about an inch and a half on the ridge of the upper mandible, and in having the hinder part of the head surrounded by a continuation of the white feathers which cover the cheeks, but mixed with dusky spots.

Of the Divers.

The bill is strong, straight, and pointed: the upper mandible longest; the edges of each bending inwards: nostrils linear, the upper part divided by a small cutaneous appendage: tongue long, pointed, and serrated on each side near the base: thighs placed far backward: legs thin and flat, and extended horizontally: toes four in number; the exterior the longest; the back one small, and joined to the interior by a thin membrane: tail short, consisting of twenty feathers. These birds are broad, flat, and long-bodied, and swim in a squat position on the water. Ornithologists formerly enumerated eight species of this genus, six of which, besides some doubtful varieties, were said to frequent the British shores. Subsequent observation, however, has greatly reduced this list. Still even the latest writers are by no means agreed as to the precise number of species.



THE GREAT NORTHERN DIVER.

LOON, IMBRIM, OR EMBERGOOSE.

(*Colymbus glacialis*, Linn.—*L'Imbrim*, Buff.)

The Great Diver weighs about sixteen pounds; measures three feet six inches in length, and four feet eight in breadth. The bill is black, four inches and a half long, and strongly formed: the head is of a deep black, glossed with green and purple reflections: the neck appears as if wrapped obliquely round with a bandage of the same colours as the head; the feathers in the spaces between are white, streaked down the middle with narrow black lines; the sides of the breast are marked in the same manner: the whole of the upper parts are black, spotted with white: the spots on the scapulars are the largest, and of an oblong square shape, placed in rows, two on the end of each

feather: the under parts are white: quills and tail black. The female is less than the male, and her whole upper plumage inclines more to brown. Her under parts are of a dirty white, and the bandages on her neck, and the spots on her body are not so distinct.

This species seldom visits the British shores, except in very severe winters. One was shot on the Tyne, at Newcastle, on the 12th October, 1824, supposed to have been driven from its northern haunts by the severe storm, from the north-east, which then raged for two days on this coast. In the summer season it inhabits the north of Europe, and the arctic coasts, as far as the river Ob, in the Russian dominions, and Hudson's Bay, in North America. The natives of some of the northern countries dress or tan the skins of these birds, as well as those of several other water-fowls, and make them into caps, pelisses, and other warm garments. They seldom quit the sea, or are seen inland, except at the breeding season, when they repair to the fresh water lakes in the Ferro Isles, Spitzbergen, Iceland, Greenland, Zetland, &c. The female lays only two eggs, which are of a dirty white or stone colour: when she quits her nest, she flies very high, and on her return darts down upon it in an oblique direction. The foregoing figure was taken from a preserved specimen in the Wycliffe Museum.

THE LESSER IMBER.

A drawing of this bird was presented by G. Strickland, Esq., of Ripon, who adds,—"As this species of the Colymbus much resembles the Imber in the colour of its plumage, I have given it the name of the *Lesser* Imber, as in weight and size it is one-third less. I have not met with any description of it, and the specimen now in my possession is the only one I have seen."

Montagu says, these birds vary much in size, and that ours is a young one in its immature plumage. From various intimations, we have little doubt that this, and the bird described in former editions under the name of Imber (C. Immer), are the young of the Great Northern Diver.

THE RED-THROATED DIVER.*

RED-THROATED LOON, OR RAIN GOOSE.

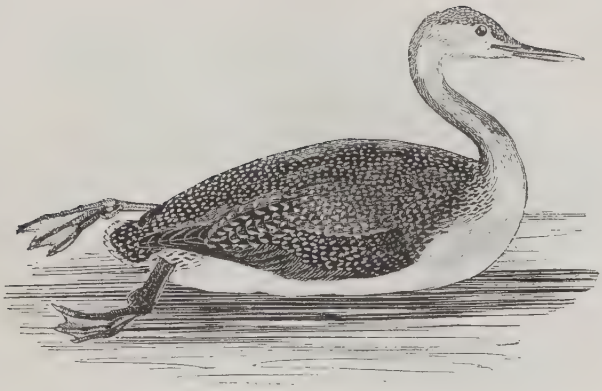
(*Colymbus septentrionalis*, Linn.—*La Plongeon á gorge rouge*, Buff.)

This bird measures three feet five inches in breadth, two feet to the end of the tail, and four inches more to the end of the toes, and weighs nearly three pounds. The bill is dark coloured; irides reddish: the head, chin, and sides of the neck are of a spotless or plain dusty lead coloured blue: the upper fore part of the neck, to the throat, is of a deep red bay: the hinder part of the neck from the nape towards the shoulders and sides of the breast, is streaked downwards with dusky and white, and formed into curious ridges, by the white edges and tips of the feathers standing outwards. The upper parts of the plumage in some specimens are of a

* It appears from Mr. Fleming, as cited by Montagu, that both male and female have the red mark on the throat. The male is the largest.

greyish dusky colour, in others of a shining deep brown, and in both thinly sprinkled all over with white spots, which on the coverts and scapulars assume a more streaked or lengthened form: the under parts are white: the legs nearly the same as those of the rest of the genus. The male and female are nearly alike in their plumage.

This species inhabits the same cold countries as the other Divers, and its manners and habits do not differ from theirs; but it is of a more lively character, and has a more sprightly appearance than any of the other kinds: also, like the rest of the genus, it is driven, in severe winters, from the northern to more southern climes. They breed, and are common in Greenland, Hudson's Bay, Iceland, the Zetland and Orkney Isles, &c. The female makes her nest, which is composed of moss and herbage, lined with a little of her own down, on the very edge of the shore: she lays two eggs, which are nearly of the size of those of a hen, but of a longer shape, and of a dingy bluish white, thinly marked with dusky spots. They live in pairs with inconceivable affection, run swiftly upon the water, dive immediately, but are very awkward upon the land, from which they rise with great difficulty. Their flight, however, when once on the wing, is both strong and swift: they rise to a great height, making at intervals a disagreeable croaking, or a loud howling cry. Their tenacity of life is very great.

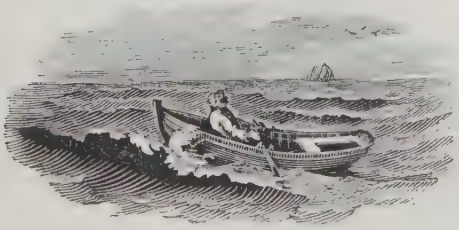


THE FIRST SPECKLED DIVER.

SPRAT LOON, OR SPECKLED LOON.

(*Colymbus stellatus*, Linn.—*Le Petit Plongeon*, Buff.)

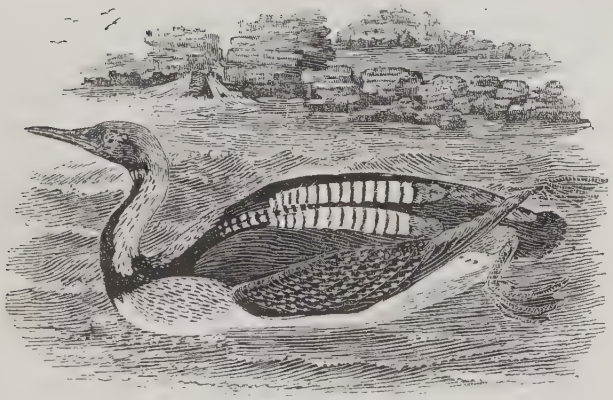
The above figure was done from a badly stuffed specimen, the neck of which had been too much stretched: in former editions, a particular description of it was given under its present name. This, however, would now appear to be unnecessary, if ornithologists are right in their opinions, that it is the young of the Red-throated Diver.



THE SECOND SPECKLED DIVER.

A pair of these birds were shot on the Tyne, at Newcastle, in the month of January, by Mr Pollock. They differed somewhat from the preceding, but very little, excepting in weight, from each other. This figure and description were taken from the larger bird. The smaller, which probably was the female, weighed only two pounds and a half.

This bird is now also supposed to be the young of the Red-throated Diver, in a different stage of plumage.



THE BLACK-THROATED DIVER.

(Colymbus Arcticus, Linn.—*Le Lumme, ou petit Plongeon de La Mer du Nord*, Buff.)

This bird is somewhat larger than the Red-Throated Diver, from which it differs in plumage. The bill is black, and measures about two inches from the tip to the feathers at the base; the chin, cheeks, and throat are of a sooty black; a few narrow streaks of white cover the gullet; the fore part of the head is dusky, tinged with ash, and fades to a lighter colour as it is continued down the hinder part of the neck, where it assumes a dirty light ash; this is boundered its whole length on each side by longitudinal spots, disposed in streaks of black and white; the front of the neck is black, with a purple gloss, which, branching backwards, falls down towards the hinder part, and joins the scapulars: the feathers on the sides of the breast

are like those on the sides of the neck; the upper parts of the plumage are glossy black, barred on the shoulders and scapulars with oblong square white spots; the wing coverts are sprinkled over with smaller roundish ones, the under parts are white; quills dusky; tail black; legs dark, and reddish on the inside.

The Black-throated Diver, like the preceding, is common in all the Arctic regions, and but rarely visits England. It has the same disagreeable cries which, in both kinds, are believed by the natives of Norway, the Orkney Isles, &c., to forebode heavy rains or bad weather. Their skins are dressed, and made into caps, hoods, &c., and are much esteemed as a covering for the head and breast in the rigorous climates in which these birds are found, the great thickness of the feathers rendering them very fit for that purpose.

A bird supposed to be of this species, was caught in the month of March, in a pool near Dukesfield, Northumberland, and presented to the author, by Mr Thomas Crawhall: it wanted the black patch on the throat; its tail, like the First Grey Speckled Diver's, was tipped with white, and its legs were marked like those of the second. It measured two feet two inches from the bill to the tail.*

* We have to acknowledge our obligation to Mr Benjamin Leadbeater for the loan of a dried skin of this prettily marked bird, satisfied that he has done all in his power to furnish specimens (in this and other instances) enabling us to make correct likenesses; although the pencil might be said to be *itching* for a single peep at a living subject of this interesting depredator on the finny tribes.

Of the Terns, or Sea Swallows.

Birds of this genus have generally straight, slender-shaped, and pointed bills: nostrils linear: tongue slender and sharp: their legs are small, the webs deeply scalloped from the toe ends to the middle, and the back toe small: the wings are very long, and the tail forked.* These birds continue long on the wing, and, in their quick and circling evolutions, they rise and sink in the air, or glide along near the surface of the waters, sometimes snapping at the insects in their way, or, suddenly checking their course, darting down upon their finny prey, which they swallow in the ascent, without delaying their progress. Their common residence is the sea-shores, or the mouths of large rivers, whose courses, however, they sometimes ascend nearly to their rise. They also visit loughs and lakes very distant from the ocean, and likewise make excursions a long way out to sea. They congregate in large flocks, but particularly in the breeding season, when they are more than usually restless, wheeling and redoubling their varied flight high in the air, and uttering their loud screams in clamorous confusion. Some of the species are described as breeding on the shores, and depositing their two eggs upon the bare rock; others lay three or four eggs in a hole made in the dry sand; and some nestle among the reeds and rushes in the marshy borders of lakes. The young

* In the young of some species, the tails are nearly even at the ends.

keep the nest a considerable time after they have been hatched, not offering to leave it until their wings have attained sufficient length and strength to enable them to fly with ease. Though almost wholly web-footed, they are seldom seen to swim; the moult occurs twice a year in all the known species: no outward difference is observable between the sexes.

One kind or another of these birds is met with in almost every part of the world. Latham enumerates twenty-three species, besides varieties.

THE COMMON TERN,

GREAT TERN, KIRMEW, OR SEA SWALLOW,

(*Sterna Hirundo*, Linn.—*La grande Hirondelle de Mer*, Buff.)

Measures above fourteen inches in length, thirty in breadth, and weighs more than four ounces. The bill is crimson, tipped with black, and about two inches and a quarter in length: the head is capped with a longish black patch, which extends over the eyes, and ends in a point below the nape of the neck: the throat, cheeks, neck, and the whole of the under parts are white: the tail, which is long, and greatly forked, is also white, except the two outside feathers, which are black on their exterior webs; but in flying, this fork is frequently closed so as to look like a single feather. The upper part of the plumage is of a fine pale lead

colour: the quills are of a deeper cast, the outside ones the darkest: the legs and feet red.

The female forms her nest in the moss or long coarse grass, near the lake, and lays three or four eggs of a dull olive, marked with different-sized black spots at the thicker end: it is said, she covers them only during the night, or in the day when it rains; at all other times she leaves the hatching of them to the heat of the sun.

This clean-looking pretty bird is common in the summer months on the sea-coasts, rivers, and lakes of the British Isles, and is also met with in various parts of Europe, Asia, and America. It migrates southward to the Mediterranean, and to the Madeira and Canary Isles, and northward as far as Spitzbergen and Greenland.

THE LESSER TERN,

LESSER SEA-SWALLOW,

(*Sterna minuta*, Linn.—*La petite Hirondelle de Mer*, Buff.)

Measures about eight inches in length, and nineteen in breadth, and weighs a little more than two ounces. It looks like the former species in miniature; is equally, if not more delicately elegant in its plumage and general appearance, and its manners and habits are much the same; but it is not nearly so numerous, or so widely dispersed. It differs from the Common Tern in having the black patch on its head boundered by a white line on the front of the brow, and over each eye; in the tail being wholly white; and, in proportion to the size of the bird, much shorter or less forked; and in the bill and the feet being more inclined to orange or yellow. Nothing can exceed the clean, clear, and

glossy whiteness of its close-set feathers on the under parts of the body; but the upper plumage is of a plain *sober* lead-coloured grey. The egg is an inch and a half in length, of a dirty yellowish brown, dashed all over with reddish blotches.

This bird is met with in the summer months on all our coasts, also about the Baltic, in some parts of Russia, the river Irtish in Siberia, the Black and Caspian Seas, and in America near New York, &c. In Belon's time, "the fishermen floated a cross of wood, in the middle of which was fastened a small fish for bait, with limed twigs stuck to the four corners, on which the bird darting, was entangled by the wings."

THE SANDWICH TERN.

(*Sterna Cantiaca*, Gm., Linn.)

A pair of these birds, male and female, was shot on the Farn Islands, on the coast of Northumberland, in July, 1802, from the former of which this figure was taken.* They measured two feet nine inches from tip to tip of the wings: the bills were tipped with yellow: the black feathers which capped and adorned their heads were elongated behind, forming a kind of peaked crest, which overhung the nape and hinder part of the neck: the feathers of the fore part of the neck and breast, when ruffled up, appeared delicately and faintly

* These birds, as well as specimens of nearly the whole of the different kinds which breed on the Farn Isles, were, after great trouble and risk, shot there, expressly for the use of this work, by Major Shore and the late Major Henry Forster Gibson, of the 4th dragoons, to whom the author feels deeply indebted for the facilities afforded to his labours.

blushed with red. In other respects they corresponded so nearly with Mr. Latham's accurate description, that to attempt giving any other is needless.—"Length eighteen inches: bill two inches; colour black, with the tip horn colour: tongue half the length of the bill: irides hazel: fore-head, crown, hind-head, and sides above the eyes black: the rest of the head, neck, under parts of the body and tail, white; the back and wings pale hoary lead colour: the first five quills hoary black, the inner webs deeply margined with white; the sixth like the others, but much paler: the rest of the quills like the back: the tail is forked, the outer feathers six inches and a quarter in length; the wings reach beyond it: legs and claws black: the under part of the feet dusky red." "Some specimens have the top of the head dotted with white." "In young birds the upper parts are much clouded with brown; and the whole of the top of the head greatly mixed with white: but this is not peculiar, as the young of other Terns with black heads are in the same state." "It is pretty common on the Suffolk and Kentish coasts in the summer months, breeds there in the month of June, is supposed to lay its eggs upon the rocks, and to hatch them about the middle of July." He adds, "Whether these birds only visit us at uncertain seasons, or have hitherto passed unnoticed among other Terns, we know not; but believe that this has not yet been recorded as a British species." "They generally make their appearance in the neighbourhood of Romney, in Kent, about the middle of April, and take their departure in the beginning of September."

(*Sterna nævia*, Linn.—*Le Guifette*, Buff.)

Latham says this bird is in "length eleven inches and a half. Bill dusky: back part of the head and nape black, edged with rufous brown: the eye half surrounded at the back part with a black crescent: the rest of the head, neck, and under parts white: back and wings of a bluish brown, the margins of the feathers paler: the outward part of the wing more inclined to blue grey: the wings exceed the tail in length; the last very little forked: legs dusky brown." He adds, "This by authors has been considered as a species, but is, no doubt, a young bird merely of the Sandwich Tern."

Buffon gives a figure, and describes this bird as common on the coast of Picardy, and frequently seen flying on the rivers Seine and Loire: that it is of a middle size between the Greater and Lesser Tern, but differs from them in some particulars in its habits and œconomy, viz.: that it feeds more upon insects, flies, &c., is not so clamorous as the Greater Tern, does not lay its eggs on the naked sand, but makes its nest in the marshes with a few dried herbs, in a tuft of grass or moss, in some insulated hillock, and that it sits upon its eggs closely (generally three in number) till the young are hatched.

THE ROSEATE TERN.

(Sterna Dugalli, Mont.)

Montagu mentions this elegant looking bird as an undescribed species of Tern; and from the white feathers of the whole under parts being tinged with a most delicate rosy blush, he has named it as above. The bill is slender, slightly curved, and about an inch and five-eighths long; it is jet black, excepting at the base, where it is of a bright orange; the irides are black; the head is also black, and the feathers elongated down the back part of the neck; the upper parts pale cinereous; quill feathers narrow, the shafts white, the first has the exterior web black, with a hoary tinge; the others are also hoary next the shafts, and all margined deeply on the inner webs with white to the tips; the tail is greatly forked, extremely slender, and extends two inches beyond the closed wings; the legs and feet, including the bare space of about half an inch above the knees, are of a bright red: the claws black and hooked. The

specimen from which Mr. Montagu describes this bird, was, with several others, shot in the West Highlands of Scotland, in July, 1812, and presented to him by Dr. McDougall, of Glasgow, who also, in his communications respecting these birds, points out the difference between them and the other species of Terns, which swarmed in their company on the same rocky islands. The above figure was taken from a preserved specimen of a bird shot on the Farn Isles, in June, 1820, where several of them, at various times, have been killed.

THE BROWN TERN.

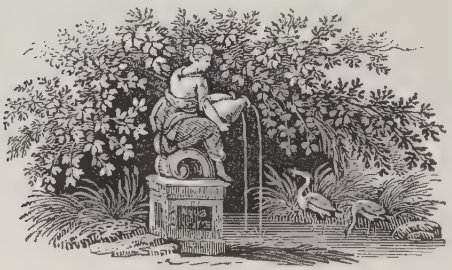
(*Sterna nigra*, Linn.—*Sterna Fusca*, Ray.—*Brown Tern*, Willoughby.—*Brown Gull*, Pennant.

"THE whole under side white; the upper brown; the wings partly brown, partly ash-colour: the head black: the tail not forked. These birds fly in companies."

This short and imperfect account is all that ornithologists have been enabled to give of this doubtful species, which has found its way into notice merely from the communication of Mr. Johnson* to Mr. Ray, copied by the latter into his Synopsis of Birds, &c.

Montagu thinks this is one of the Common Terns in its immature plumage.

* Mr. R. Johnson, the correspondent, friend, and assistant of the immortal Ray, was vicar of Brignal, in Yorkshire. He died there on the 7th of May, 1695, aged 66 years.



THE BLACK TERN.

(*Sterna fissipes*, Linn.—*L'Epouvantail*, Buff.)

This bird generally measures ten inches in length, and twenty-four in breadth, and weighs about two ounces and a half. The bill is black, and from the tip to the brow is about an inch and a quarter long; the head, neck, breast, and under part, as far as the thighs, black; the lower belly and vent pale ash; the upper parts of the plumage, including the wings and tail, are dark hoary lead-coloured blue; the tail is not greatly forked, nor long, and in most specimens, the exterior webs of the two outside feathers are white; the legs and feet crimson; claws black; the female does not differ materially in her appearance from the male.

This species frequents the sea shores in summer, but in habits and manners it differs somewhat from the rest of the Terns, with whom it does not associate. The

cry is shriller, and its evolutions and turnings while on the wing, shorter and more rapid. It seems to prefer the rivers, fens, marshes, and lakes, to the sea. The nest is built among reeds and rushes, in marshy places, with flags and coarse grass, upon a tuft just above the surface of the water. The eggs, four in number, are of a dirty greenish colour, spotted, and encircled with black about the thicker end. It feeds on beetles, maggots, and other insects, as well as on small fishes. Voyagers say it is met with at Hudson's Bay, Newfoundland, and Iceland, and that it is common in Siberia, and the salt lakes in the deserts of Tartary. Our figure was drawn from a preserved specimen in the Museum of Ravensworth Castle.

THE GULL-BILLED TERN.

(*Sterna Anglica*, Mont.)

This bird was first pointed out as a distinct species by Montagu, it having before been confounded with the Sandwich Tern, from which, he says, it differs in a variety of respects. The bill is about an inch and a half long, thick, strong, and angulated on the under mandible, like the bill of a Gull, and wholly black; the upper part of the head, taking in the eyes, is black, which extends down part of the neck; the upper parts of the plumage, including the tail and its upper coverts, are cinereous, the outer feathers of the tail, on each side, only being white. The quills are hoary, but the tips of the first five are black, for an inch or more, without the smallest margin of white on that part; a part of the inner webs are white, but it does not quite reach the margins, the very edges being dusky for half the length of the feathers. The legs rather exceed two inches in length from the heel to the knee, their colour rufous black; the toes are longer than those of the Sandwich Tern, especially the middle one, and the claws unusually straight.

We have been favoured with a specimen of a bird said to be the Gull-billed Tern, but the characters are so obscurely marked, that we do not feel authorized in giving a figure of it.

Of the Gull.

The bill is strong and straight, but bent downwards at the point; the nostrils are pervious, oblong, and narrow, and placed in the middle; the lower mandible has an angular prominence on the under side, which tapers towards, and forms its tip; the tongue is a little cloven. The body is clothed with a great quantity of down and feathers, which, together with the large head and long wings, give these birds an appearance of bulk, without a proportionate weight. The legs are small, naked above the knees: feet webbed, and the back toe detached, and very small.

This genus, which some naturalists have described as consisting of about nineteen species, besides a few varieties, is numerously dispersed over every quarter of the world, and is met with, at certain seasons, in some parts, in such multitudes, that the whole surface of the ground is covered with their dung: and their eggs are gathered by the inhabitants in prodigious numbers. They assemble together in a kind of straggling mixed flocks, consisting of various kinds, and greatly enliven the beach and rocky cliffs by their irregular movements, whilst their shrill cries are often deadened by the noise of the waves, or nearly drowned in the roarings of the surge. They occasionally take a wide range over the ocean, and are met with by navigators many leagues distant from the land. Their plumage, which in each individual of the species varies with its age,* is clean and

* Hence the confusion which has arisen among authors and nomenclators, respecting this numerous tribe of birds.

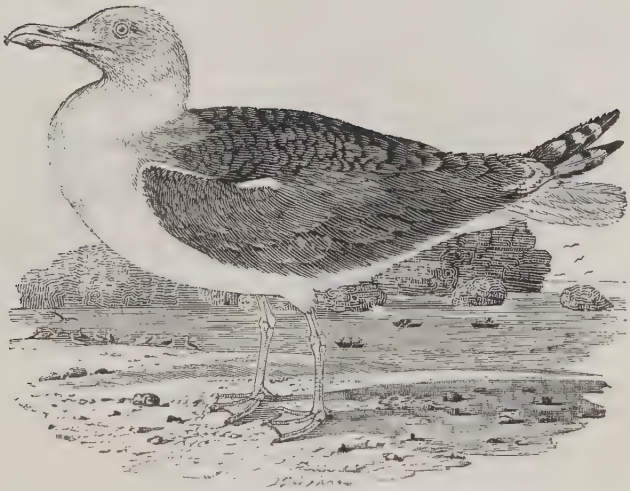
agreeable, but their carriage and gait are ungraceful, and their character is stigmatized as cowardly, cruel, lazy, thievish, and voracious; for which reason they have by some been called the vulture of the sea: and it is certain [though this trait is not peculiar to them] that the stronger will rob the weaker kinds, and that they are all greedy and gluttonous, almost indiscriminately devouring whatever comes in their way, whether of fresh or putrid substances, until they are obliged to disgorge their overloaded stomachs. On the contrary, they are able to endure hunger a long while: Buffon mentions one that lived nine days without tasting food.

Ornithologists divide this genus into two kinds, calling the larger Gulls, and the lesser Mews, and class with the former kinds those which measure eighteen or twenty inches from the point of the bill to the end of the tail, and with the latter all those which are of less dimensions. The larger kinds are not so common in the warm as in the cold climates, where they breed and rear their young, feeding chiefly upon the rotting carcases of dead whales, &c., which they find floating on the sea, among the ice, or driven on shore by the winds and waves. It is now ascertained by Captain Sabine, that they do not remain in the dreary regions of ice and snow during the winter, the extreme severity of which compels them all to quit their native climes.

In temperate and cultivated countries some species occasionally leave the shores for the interior, probably to search for a change of food, such as worms, slugs, &c., and of these they find, for a time, an abundant supply on the downs and pastures which they visit.

In the northern isles of Scotland, some of the smaller kinds, especially the common Winter Mew, follow the plough furrow in great numbers. The jelly-like substance which is sometimes met with in the fields, and known by the name of *star-shot*, is believed to be the remains of half-digested worms, &c., which they have discharged from their over-loaded stomachs.

As there is no end of the conjectures, opinions, and doubts respecting many of the Gulls, which, from the slightest differences of plumage, have, in some instances, been branched out into new varieties, in this work the descriptions of others have been given in preference to making alterations, when the author could not with certainty throw any new light upon the subject.



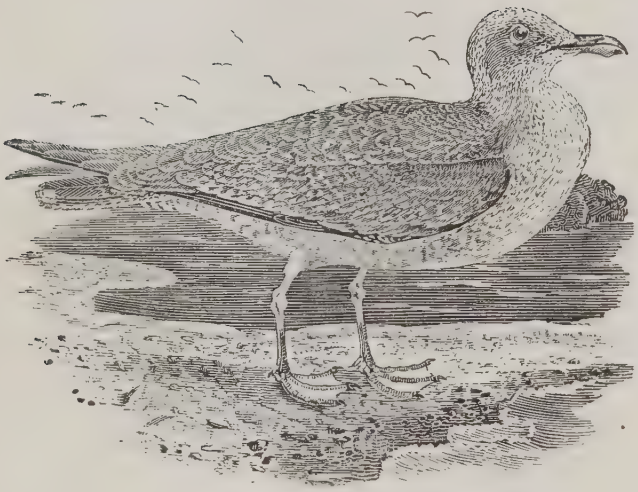
THE BLACK-BACKED GULL.

GREAT BLACK AND WHITE GULL.

(*Larus marinus*, Linn.—*Le Goéland noir manteau*, Buff.)

This species measures from twenty-six to twenty-nine inches in length, and five feet nine inches in breadth, and weighs nearly five pounds. The bill is pale yellow, very firm, strong, and thick, and nearly four inches long from the tip to the corners of the mouth: the projecting angle on the lower mandible is red, or orange, with a black spot in the middle, on each side: the irides are yellow, and the edges of the eye-lids orange. The upper part of the back and wings black: all the other parts of its plumage, and the tips of the quills are white: legs pale flesh colour.

The Black-backed Gull is common in the northern parts of Europe, the rocky isles of the North Sea, and in Greenland. Though it was known to Fabricius, it must be very rare in the higher parts of Baffin's Bay, Captain Sabine having seen only one specimen there. They are but thinly scattered on the coasts of England, where they, however, sometimes remain to breed on the highest cliffs which overhang the sea. In their native haunts, their favourite breeding places are high inaccessible islets, covered with long coarse tufty grass. Their eggs are of a round shape, of a dark olive, thinly marked with dusky spots, and quite black at the thicker end. Their cry of *kac*, *kac*, *kac*, quickly repeated, is roughly hoarse and disagreeable.



THE WAGEL.

GREAT GREY GULL, GRISARD, OR BURGO-MASTER.

(*Larus nævius*, Linn.—*Le Goëland varié, ou le Grisard*, Buff.)

THE bill is black, scarcely three inches long: irides dark blue. The whole plumage is a mixture of ash-coloured brown and white. The feathers on the back are dark in the middle, with whitish grey edges: wing coverts nearly the same, but more spotted; and the under parts of the body have a much lighter and more mixed appearance: quills plain black: middle tail feathers the same, but tipped with white, and crossed with a narrow white bar towards the root or base: the side feathers are mottled black and white: legs dirty white, sometimes blushed with red.

We have continued the name and description of this bird as a distinct species, though it is now believed to be the young of the Black-backed Gull. The young of all the British Gulls, except perhaps the Kittiwake, and Black-headed Gull, have the whole plumage more or less spotted with ash grey on a dull white; for the first year or two, they all appear in the Wagel dress, scarcely differing in any thing but in shade and size.

THE LESSER BLACK-BACKED GULL

(*Larus fuscus*, Linn.—*Le Goëland gris*, Briss.)

Is similar in appearance to the Black-backed Gull, but is much less, and is not quite so dark on the back as that bird is described to be. In the stuffed specimen presented to this work by Mr. Laurence Edmondston, the upper plumage is of a dark bluish lead colour; the greater coverts, scapulars, and secondaries the same, but tipped with white; the primary quills, which are, in all the visible parts, of a dark brown, are also tipped with white; the rest of the plumage white; eye-lids red; irides pale yellow; the bill the same, but of a much deeper tinge, and the angular knob of the under mandible is reddish orange: legs yellow.

Temminck says, " It frequents the sea coasts in winter, and is met with migratory on the rivers and inland seas of the eastern parts of Europe. It is common in the Baltic; and in autumn is seen on its passage along the coasts of Holland and France, but more especially of the Mediterranean. It is likewise found in North America." It breeds on the Farn Islands. The nest is composed of dried bent grass. The eggs, three in number, are of an olive colour, spotted with brownish black.

THE HERRING GULL.

SILVERY GULL.

(*Larus argentatus*, Linn. (Gm.)—*Le Goéland à manteau gris ou cendré*, Buff.)

The weight of this bird exceeds thirty ounces; the length is about twenty-three inches, and the breadth fifty-two. The spot on the angular knob of the under mandible is deep orange; the rest of the bill yellow: irides pale yellow; edges of the eye-lids red. The back and wing coverts are dark bluish ash: the first five quills in most specimens are black on the upper parts, and have each a roundish white spot on the outer webs

near the tips; others are marked differently on the quills: legs pale flesh colour. The back and wings of some of this species, which are supposed to be the young not arrived at full plumage, are ash-coloured, spotted with brown.

The haunts, manners, and habits, as well as the general appearance of this Gull, are very similar to those of the preceding species, but this is much more common on the British shores: they make their nests of dry grass, mixed with sea-weed, on the projecting ledges of the rocks, and lay three eggs of an olive ground, spotted with black. They have obtained their name from pursuing and preying upon the shoals of herrings. Fishermen describe them as the constant, bold, intruding attendants on their nets, from which they find it difficult to drive them away. This species, like the preceding, is met with in the northern seas, but has been observed to wander farther into southern climates.

This Gull is said to be remarkable for its vigilance, for, on the approach of the sportsman with his gun, it seems all upon the alert, and, by its clamorous well-known cries, intimates the danger to other birds.

THE GLAUCOUS GULL.

ICELAND GULL.

(*Larus Glaucus*, Linn. (Gm.)—*Le Burgermeister*, Buff.)

The above figure and the following were taken from stuffed specimens lent to this work by Mr. L. Edmondston, and the descriptions extracted from his papers, read to the Wernerian Society of Edinburgh. He considers this a species not hitherto noticed as a British bird; and describes it, when mature, as being clothed with a downy Swan-like plumage, rendering it almost impenetrable to any but large shot, and as weighing five pounds; breadth five feet two inches; length two feet five inches. The back and upper part of the wings very pale blue; head and neck faintly streaked with

dull grey. The rest of the plumage and the primary quills white; irides pale yellow; bill the same, but of a deeper cast, and the knob on the under mandible reddish orange. Legs and feet much like those of the Herring Gull, but larger: claws dusky, and rather blunt. Its place of breeding is unknown; it is regularly migratory, in small flocks, arriving in the Zetland Islands about the middle of autumn, and departing towards the end of spring. Its flight is more equal and measured, and has less of that Kite-like soaring than others of this tribe. It is also more powerful, and equally voracious. Captain Sabine says,—"This fine species of Gull is as numerous in the Polar Sea as in Baffin's Bay and Davis's Straits, occupying with their nests the pinnacles of rocks, and the projecting ledges of cliffs on the sea-shore."

THE YOUNG GLAUCOUS GULL.

The above figure was taken from the stuffed specimen of an immature bird: it is mottled much in the same way as the Wagel, but the colours are somewhat different, the ground colour of the whole plumage being of a dull white, and the spots of a pale dingy brown; bill dark horn colour: legs and toes pale flesh: irides silvery grey. By the fishermen of Zetland, it is called the Iceland Scorie, that being the name given there indiscriminately to the young of the three larger species of the Gull tribe.

THE IVORY GULL.

(*Larus eburneus*, Linn. (Gm.)—*La Mouette blanche*, Buff.)

Length sixteen to nineteen inches, extent three feet three inches and a half. Bill bluish black at the base, paler towards the tip; irides pale lead colour, but becoming much darker in old birds. The whole plumage in the adult birds pure white; the skin throughout is covered with a profusion of remarkably thick fine white down; the wings are long, and reach beyond the tail; the tibia naked a little above the knees; legs, feet, and claws black; hind toe very distinct: the voice harsh and strong, and its appetite voracious and indiscriminating. The young are marked with brownish black circular spots, sparingly distributed on the back and lower parts of the body, and most numerous on the wing coverts and scapulars; the

tail and primaries are tipped with the same colour; the throat is mottled with spots less distinct, and of a paler shade. It is peculiarly an arctic bird, inhabiting chiefly Spitzbergen, and the highest northern latitudes.

Mr. L. Edmondston, in his paper read to the Wernerian Society, of Edinburgh, observes that he is not aware this species has been noticed before on the British coast. His specimen, presented to the Edinburgh Museum, was, through the liberality of the distinguished Professor of Natural History, sent hither for the use of this work. It was killed in Balta Sound, Zetland, on the 13th of December, 1822. It was not quite mature. Captain Sabine says, these birds were rarely seen in the Polar Sea, but that they were abundant in Baffin's Bay, usually in company with the Fulmar.

THE COMMON GULL.

COMMON SEA-MALL, OR MEW.

(*Larus canus*, Linn.—*La Grande Mouette cendrée*, Buff.)

The Common Gull generally measures between sixteen and seventeen inches in length, thirty-six, and sometimes more in breadth, and weighs about one pound. The bill is pale yellow, tinged with green, and an inch and three quarters long; irides hazel: edges of the eye-lids red; the upper part of the head and cheeks, and the hinder part and sides of the neck, are streaked with dusky spots: the back, scapulars, and wings are fine pale bluish grey: the throat, rump, tail, and all the under parts are pure white: the first two quills black, with a pretty large white spot near the tips; next four tipped with black, and the secondaries largely with white: legs greenish, or a dirty white. This is nearly the description of an individual; but from the number

which the author has examined, it is certain that these birds vary, probably from age, climate, or season, in the markings of the head, quills, tail, and in the colour of the bills and feet, hardly two being found exactly alike. Some have the head quite white; some the quills plain black at the ends; others the tail tipped with black, and the feet blushed with red, green, or blue. Their plumage and look altogether is very clean and agreeable.

The habits and manners of this species are much the same as those of the rest of the genus: they are spread all over the globe, and are the most common and numerous of all the Gulls which frequent the British shores. They breed on the rocky cliffs; and lay two eggs, nearly of the size of those of a Hen, of an olive brown, marked with dark reddish blotches, or irregular spots. At the mouths of the larger rivers, they are seen in numbers, picking up the animal substances which are cast on shore, or come floating down with the tide: for this kind of food they watch with a quick eye, and it is curious to observe how such as are near the breakers will mount upon the surface of the water, and run splashing towards the summit of the wave to catch the object of their pursuit. They also, at particular seasons, resort to the inland parts to feed upon worms, &c.

Some persons who live near the sea commonly eat this, as well as various other kinds of Gulls, which they describe as being good food, when they have undergone a certain sweetening process before cooking, such as burying them in fresh mould for a day, or washing them in vinegar.

THE KITTIWAKE,

ANNETT, OR TARROCK,

(*Larus tridactylus*, Linn.—*Mouette cendrée tachetée, ou Kutgechef*, Buff.)

Measures from fourteen to seventeen inches in length, thirty-eight to forty in breadth, and weighs generally about fourteen ounces. The bill is greenish yellow, the upper mandible more regularly arched than in any of the other species: the inside of the mouth and edges of the eye-lids are orange: the irides dark: the head, neck, under parts and tail, pure white: back and wings lead or ash grey: the exterior edge of the first quill feather, and the tips of the next four or five, are black: legs dusky: hinder toe not bigger than a small

wart. Some specimens of the Kittiwake, probably the young birds, are described as having the auriculars tipped with black.

These birds chiefly haunt the rocky promontories and islets on the British coasts, always preferring mural precipices: they are likewise widely dispersed over the world, particularly in the north, and are met with from Newfoundland to Kamschatka, as well as in all the intermediate parts, and as far north as navigators have visited. Capt. Sabine says, they are very rarely seen in the Polar Sea.

This specimen was shot on one of the Farn Islands, in July, 1802.

THE YOUNG KITTIWAKE.

The bill is black, short, and strong: the head, neck, breast, belly, and tail are white, with the exception of the tips of ten of the middle feathers of the tail, a spot on the auriculars, another under the throat, and a crescent-shaped patch on the hinder part of the neck, all of which are black: the back and scapulars are of a bluish grey: lesser coverts of the wings deepish brown, edged with grey: some of the greater covert feathers are of the same colour, and others of plain grey: the outer webs and ends of the first four quills, and the tips of the next two are black: all the rest are wholly white: the legs are of a dingy ash colour.

Our figure is taken from a stuffed specimen lent by Sir Hedworth Williamson, Bart.: it was shot on the Durham coast, in 1816. The bill is dusky, and

measures from the tip to the brow one inch and an eighth; auriculars tipped with black; tail also tipped with the same, the two outer feathers the longest.

Montagu gives a figure and description of a bird shot on the Thames, near Chelsea, under the name of the Little Gull (Larus minutus), which we suspect to be the Young Kittiwake. The lower part of the back in the foregoing specimen is not black, but in most other respects it differs little from his description.

THE BLACK-HEADED GULL.

BLACK-CAP, OR PEWIT GULL.

(*Larus ridibundus*, Linn.—*La Mouette rieuse*, Buff.)

This pretty-looking bird measures fifteen inches in length, and thirty-six in breadth, and weighs about ten ounces. The bill is rather slender, and of a full red: irides hazel; edges of the eye-lids red; head black; in some specimens it inclines to a mouse-coloured brown. The back and wings are of a delicate pale bluish ash colour; the neck, tail, and all the under parts, pure white. The first quills in the specimen from which the above drawing was made, were black on the outer webs; those next them white, and black towards their tips: others of the quills were partly ash-coloured, and partly white: the legs red.

The Black-cap Gulls breed on the marshy edges of rivers, lakes, and fens, in the interior parts of the country. They make their nest among the reeds and rushes, of heath or dried grass, and lay three or four eggs of an olive brown, blotched over with spots and streaks of dull rusty red. As soon as the young are able to accompany them, they all retire from those places, and return to the sea.

In former times these birds were looked upon as valuable property, by the owners of some of the fens and marshes in this kingdom, who, every autumn, caused the little islets or *hafts* in those wastes, to be cleared of the reeds and rushes, in order properly to prepare the spots for the reception of the old birds in the spring, to which places, at that season, they regularly returned in great flocks to breed. The young ones were then highly esteemed as excellent eating, and on that account were caught in great numbers before they were able to fly. Six or seven men, equipped for this business, waded through the pools, and with long staves drove them to the land, against nets placed upon the shores of these hafts, where they were easily caught by the hand, and put into pens ready prepared for their reception. The gentry assembled from all parts to see the sport. Dr. Plot,* in his Natural History of Staffordshire, published in 1686, gives the

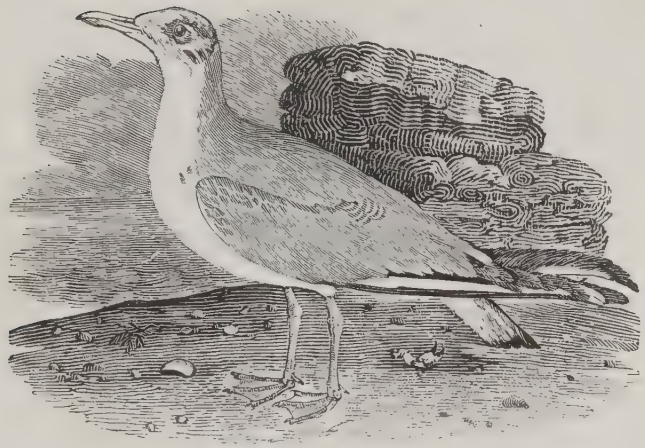
* Dr. Plot describes them as coming annually "to certain pools in the estate of the right worshipful Sir Charles Skrymsher, Knight, to build and breed, and to no other estate but that of this family, in or near the county, to which they have belonged *ultra hominum memoriam*, and never moved from it, though they have changed their station often." What the doctor relates of the attachment of these

above particulars, and says that in this manner as many have been caught in one morning as, when sold at five shillings per dozen, (the usual price at that time,) produced the sum of twelve pounds ten shillings; and that in the several drifts on the few succeeding days of this sport, they have been taken in some years in such abundance, that their value, according to the above rate, was from thirty to sixty pounds,—a great sum in those days. These were the *See-Gulles* of which we read as being so plentifully provided at the great feasts of the ancient nobility and bishops of this realm. Although the flesh of these birds is not now esteemed a dainty, and they are seldom sought after as an article of food, yet in the breeding season, where accommodation and protection are afforded them, they still regularly resort to the same old haunts which have been occupied by their kind for a long time past.* The foregoing figure and description were taken from a specimen shot on Prestwick-Car, near Newcastle upon Tyne.

According to Temminck, the Larus Erythropus of Linnæus, La petite Mouette grise of Brisson, the Brown-Headed Gull of Latham, is believed to be this species in its immature plumage.

birds to the head of that family, of their removal to another spot immediately on his death, and of their returning again with the same predilection to his heir, is curious enough, although bordering very much upon the marvellous. Willoughby gives nearly the same account, in his excellent Ornithology, published in 1678, and computes the sale of the birds to amount to twenty-five pounds per annum.

* This is the case with the flocks which now breed at Pallinsburne, in Northumberland, where they are accounted of great use in clearing the surrounding lands of noxious insects, worms, slugs, &c.



THE RED-LEGGED GULL.

(*Larus cinerarius*, Gm., Linn.—*La petite Mouette cendrée*,* Briss.)

Pennant describes this as a variety of the Black-headed or Pewit Gull. He says, "It differed in having the edges of the eye-lids covered with white soft feathers. The fore part of the head white; the space round the eyes dusky: from the corner of each eye is a broad dusky bar, surrounding the hind part of the head; behind that is another reaching from ear to ear: the ends, interior and exterior edges of the three first quill feathers, black; the ends and interior sides only of the two next white: beneath, a black bar: the rest,

* This figure appears to be arranged by M. Temminck as the foregoing species in the winter plumage.

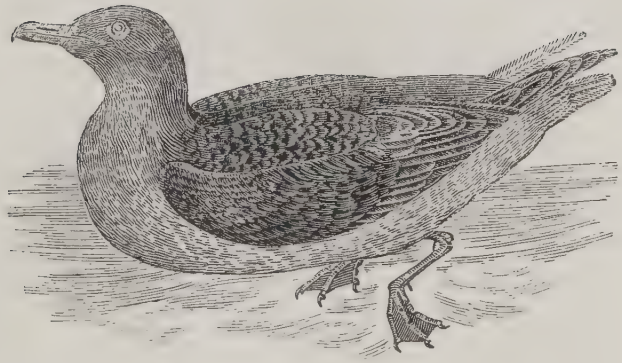
as well as the secondaries, ash colour." "In all other respects it resembled the Common Pewit Gull." "The fat was of a deep orange colour."

The above figure was taken from a stuffed specimen in the Wycliffe Museum.

THE LITTLE GULL.

(Larus minutus.)

Montagu gives a figure and description of this Gull, as a species hitherto rarely met with on the British shores. It was shot on the banks of the Thames, near Chelsea, and is in the collection of Mr. Plasted, of that place. It is said to be a native of Siberia and Russia, and the shores of the Caspian Sea. He describes it as being in its immature plumage, or in an intermediate state, or first change, between the nestling and the adult state.



THE SKUA GULL,

(*Larus Cataractes*, Linn.—*Le Goéland brun*, Buff.)

This stout bird is two feet in length, and between four and five from tip to tip of the extended wings, and weighs about three pounds. The bill is dark, more than two inches long, strong, much hooked, and sharp at the tip, and covered to the nostrils with a kind of cere, something like that of the Hawk tribe. The whole upper plumage is of a deep brown, edged with a dull rust colour: the under parts are of the same colours, but lighter; and in some birds, the head and throat are dashed or mixed with ash grey, and have the secondary quills tipped with white: the tail is white at the root, the shafts are of the same colour, and the webs of deep brown: the legs and toes are covered with coarse black scales; the claws are strong and hooked, the inner one more so than the rest.

This fierce species is met with in the high latitudes of both hemispheres, where they are much more common than in the warm or temperate parts of the globe. In Capt. Cook's voyages, they are often mentioned; and, from being numerous about the Falkland Isles, the seamen called them Port-Egmont hens. They are also common in Norway, Iceland, the Ferro, and Zetland Isles, &c. They prey not only upon fish, but also upon the lesser sorts of water-fowl, and, it is said, even upon young lambs: this, however, is doubted, and even denied: on the contrary, these birds are said to afford protection to the flocks, by driving away the Eagle, Raven, &c., which they furiously attack whenever they come within their reach, and on this account are highly valued. They are uncommonly courageous in defence of their own young, and seize, with the utmost vengeance, upon any animal, whether man or beast, that offers to disturb their nests; they sometimes attack the shepherds even while watching their flocks, who are obliged, in their own defence, to guard their heads, and to ward off the blows of the assailants by holding a pointed stick towards them, against which they sometimes dash with such force as to be killed on the spot. In like manner, they who are about to rob their nests, hold a knife, or other sharp instrument, over their heads, upon which the enraged bird precipitates, and transfixes itself. They make their nests among the dry grass, and, when the young are reared, they disperse themselves, commonly in pairs, over the ocean.

The feathers of this species, as well as those of other Gulls, are by many people preferred to those of the

Goose; and in some parts they are killed in great numbers merely for the sake of the feathers. On the English coasts they are not very common: that from which the foregoing figure was taken, was shot near Tynemouth, in the month of September.

Temminck and other naturalists have formed this Gull and the following into a distinct genus *(Lestris.)*

THE ARCTIC GULL.

TEASER, OR LONG-TAILED LABBE.

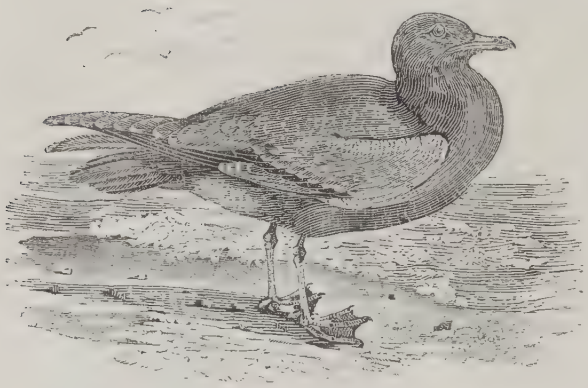
(*Larus parasiticus*, Linn.—*Le Labbe á long queue*, Buff.)

Length twenty-one inches: bill dusky, about an inch and a half long, pretty much hooked at the end, but the straight part is covered with a sort of cere; the nostrils are narrow, and placed near the end: the cheeks, throat, and neck are mixed, and streaked with dull yellow: legs and feet black. The above figure was taken from a preserved specimen, presented to this work by Mr. L. Edmondston.

They are pretty common in the northern parts of Europe, Asia, and America. Numbers of them frequent the Hebrides in the breeding season, which is

from May till August. They make their nest of moss, on the dry grassy tufts in boggy places, and lay two eggs of an ash colour, spotted with black.

These birds are not common on the British shores, nor, although widely dispersed over the face of the ocean, are they numerous any where. They do not exceed the lesser Gulls, or Mews, in size, yet their greater ferocity enables them to carry into effect a continual system of persecution, which is prompted by their ravenous appetite. As soon as they perceive that one of the Mews has seized a prey, they pursue and attack it with the speed and vigour of a Hawk, until the harassed bird, through fatigue or fear, is compelled to drop or disgorge the object of contention, which the pursuer catches in the fall, commonly before it reaches the water.



THE BLACK-TOED GULL.

LABBE, DUNG-BIRD, OR BOATSWAIN.

YOUNG ARCTIC GULL.

(*Larus Crepidatus*, Linn.—*Le Stercoraire*, Buff.)

This bird, which was formerly arranged as a distinct species, measures sixteen inches and a half in length, and three feet four inches in breadth, and weighs eleven ounces.* The bill is of a lead colour, dark at the point, from which to the brow it is little more than an inch in length: the nostrils are placed near the nail or tip, in a kind of cere not much unlike that of the Skua Gull. The whole upper and under plumage is dark brown, each feather slightly edged

* This is the weight given by Mr. Pennant. The specimen from which this figure and description were taken, weighed only eight ounces, but it was very lean. It was shot on the Durham coast, by Mr. John Forster, of Newcastle, the 1st of October, 1800.

and tipped with ferruginous: the greater wing coverts, and the first and secondary quills are dusky, and more distinctly tipped with rusty spots. The tail consists of twelve feathers, the two middle ones longer than the rest; it is of the same colour as the quills, except at the concealed part of its root, which is white. The legs are slender, and of a lead colour; the thighs and part of the joint, and the toes, black: the webs are of the same colour, excepting a small space between the first joints of the toes, which is white.

Of the Petrel.

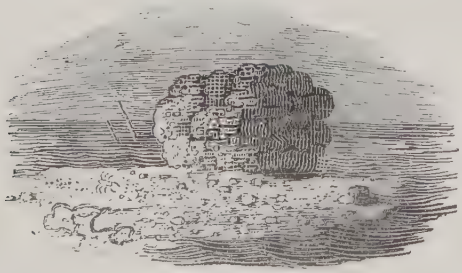
The bill straight, except the end, which is hooked and compressed: the nostrils, for the most part, contained in one tube; but in some species they are seen distinct and separate. Legs small, naked above the knees; the tarsus compressed; three toes placed forward, and fully webbed; a spur or pointed claw behind, instead of a back toe: wings very long and strong.

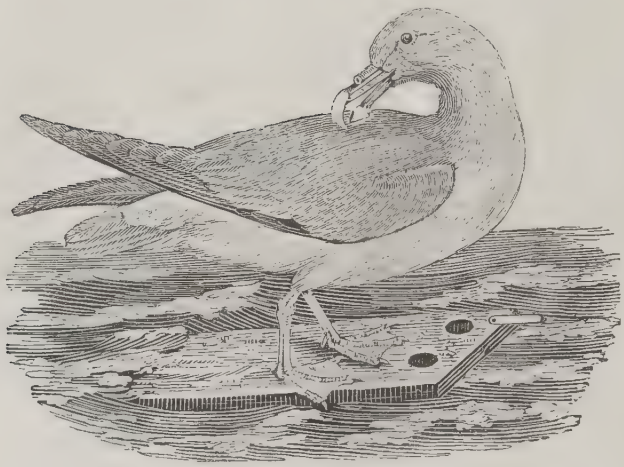
These birds are the constant, roving, adventurous inhabitants of the ocean; one species or another of them is met with by navigators in every climate, and at the greatest distances from land. They seem to sport with the tempest, and run on foot, swim, or fly at pleasure over the foaming billows, with amazing velocity.* In flying they generally keep so near to the undulating waters, that the tips of their wings often beat upon the surface, and thereby accelerate their progress. In calm weather they float and repose, as it were, on the bosom of the ocean. They are seldom seen on shore, and when they are, it is only in the breeding season, and then merely for the purposes of incubation. The females deposit their eggs in holes in the ground, or in the deep hidden caverns and recesses of the rocks, where they and their mates, while employed in rearing their young, are heard in croaking, clucking converse, not unlike the unvaried hollow sounds of a number of frogs. They are accounted a

* Some species of them are known to dive also. *Cook's Voyages.*

stupid race of birds, because they seem fearless of danger, and suffer themselves to be so nearly approached as easily to be shot, or even knocked on the head. In the preservation of their young they seem to have only one mode of defence, and that is the singular faculty of squirting oil from their bills, with great force, on the face of their enemy; by which means they sometimes succeed in disconcerting his attempts to rob their nests. They are a remarkably oily fat race of birds. Late writers have subdivided this genus into three sections, termed the *Petrels, properly so called*, the *Puffin Petrels*, and the *Swallow Petrels;* the position of the nostrils, and the form of the bill, constituting the principal ground of these distinctions.

Ornithologists have reckoned nineteen species, and a few varieties, of the Petrel, whose nostrils are contained in a single tube,—and four species which have nostrils divided into two tubes. Four species only of this genus are accounted British Birds.





THE FULMAR,

MALLEMOKE,

(*Procellaria glacialis*, Linn.—*Le Fulmar, ou Petrel Puffin gris blanc*, Buff.)

Measures seventeen inches in length, and weighs about twenty-two ounces. The bill is strongly formed, and about two inches long; the hook or nail of the upper mandible, and the truncated termination or tip of the under one, are yellow; the other parts of it are greyish, and, in some specimens, blushed with red: the nostrils are contained in one sheath, divided into two tubes. The head, neck, all the under parts, and the tail, are white: back and wing coverts blue grey: quills dusky blue: legs yellowish, inclining more or less, in some specimens, to red. The body is thickly cloathed with feathers upon a close fine down.

This species is much more common in cold than in warm or temperate climates: it has been met with in both the arctic and antarctic regions, in all parts which navigators have been able to visit, even to the foot of those impenetrable barriers, the floating islands and eternal mountains of ice and snow.

In the northern parts of the world, the natives of the various coasts and islands easily catch these heedless birds in great numbers. Pennant, speaking of those which breed on, or inhabit, the Isle of St. Kilda, says—"No bird is of such use to the islanders as this: the Fulmar supplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balm for their wounds, and a medicine for their distempers." He also says, that it is a "certain prognosticator of the change of the wind: if it comes to land, no west wind is expected for some time; and the contrary when it returns and keeps the sea."

These birds are extremely greedy and gluttonous, and will devour any floating putrid substances, such as the filth from the ships, which they fearlessly follow. They also pursue the whales, but particularly the bloody track of those which are wounded, and in such great flocks as thereby sometimes to discover the prize to the fishers, with whom they generally share; for when the huge animal is no longer able to sink, the Fulmars, in multitudes, alight upon it, and ravenously pluck off and devour lumps of the blubber, till they can hold no more.

The female is said to lay only one large white and very brittle egg, which she hatches about the middle of June.

THE SHEARWATER.

SKRABE, MANKS PETREL, MANKS PUFFIN, OR LYRE.

(*Procellaria Puffinus*, Linn.—*Le Puffin*, Buff.)

This species measures in length fifteen inches, and in breadth thirty-one, and weighs about seventeen ounces. The bill is about an inch and three quarters long; the tip black, the other parts yellowish: the tubular nostrils are not so prominent as in others of this genus. The inner coverts of the wings, and under parts of the body are white: the head, tail, thighs, and upper parts black, tinted more or less with grey: the legs are flattened on the sides, and weak; light coloured, or whitish on the fore parts, and dusky behind.

The Shearwater is found in greater or smaller numbers in almost every part of the watery world, in both hemispheres, and in every climate; but they are met

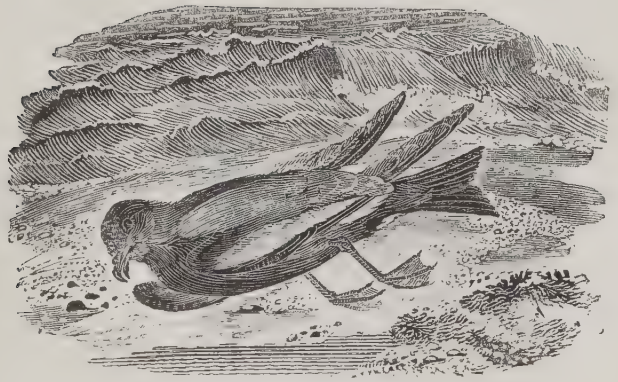
with in greater abundance in the north. In the Hebrides, and other islands with which the seas of Scotland are dotted, they are caught by the natives in great numbers, and used for the same purposes as the Fulmar.

Willoughby, whose excellent Ornithology has thrown so much light on this branch of natural history, and cleared the paths for subsequent writers, gives the following account of the coming of these birds to breed in the Isle of Man:—

"At the south end of the Isle of Man lies a little islet, divided from Man by a narrow channel, called the Calf of Man, on which are no habitations but only a cottage or two, lately built. This islet is full of rabbits, which the Puffins, coming yearly, dislodge, and build in their burrows. They lay each but one egg before they sit, like the Razor-bill and Guillem, although it be the common persuasion that they lay two at a time, of which the one is always addle." "The old ones early in the morning, at break of day, leave their nests and young, and the island itself, and spend the whole day in fishing at sea, never returning or once setting foot on the island before evening twilight: so that all the day the island is so quiet and still from all noise as if there were not a bird about it." He observes that they feed the young ones from the contents of their loaded stomachs during the night, that they become extremely fat, and are taken and salted down for keeping, and that the Romish church permitted them to be eaten in lent. He adds, further, respecting the young ones:—"When they come to their growth, they who are intrusted by the lord of the island (the

Earl of Derby) to draw them out of the rabbit-holes, that they may the more readily know and keep account of the number they take, cut off one foot, and reserve it, which gave occasion to that fable, that the Puffins are single footed. They usually sell them for about ninepence the dozen, a very cheap rate."

The above figure was taken from a stuffed specimen in the Wycliffe museum.



THE FORK-TAILED PETREL.

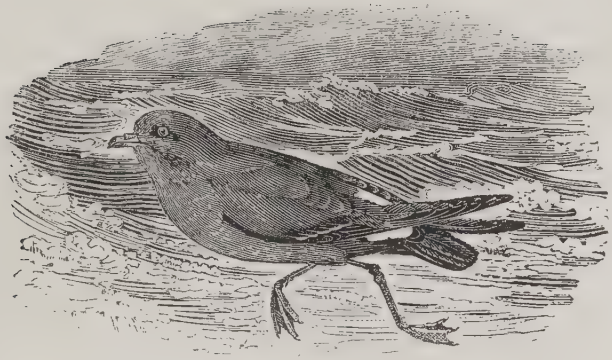
(Procellaria Leachii, Temm.)

"THIS bird, a male, weighed one ounce: length seven and a quarter inches; wings, when extended, eighteen and a half inches. The beak black; general colour of the plumage dull black; scapulars long, the ends white; upper tail coverts white, the under ones black, but white at the base; under parts wholly black: wing primaries black, the coverts lighter, forming a bar of dusky brown; the tail black, of twelve feathers, forked, the outer ones longer than those in the centre by half an inch: legs black.

"This bird was brought to Leadenhall market alive, on the 3d of November, 1823, and was said to have been caught on the Essex coast. It was purchased by a poulterer, and when brought to me in the evening, was dying for want of proper food. While swimming in a bowl of water placed in the cage in

which it had been confined during the day, it spouted liquid from its nostrils, through the tube in the manner described as peculiar to that genus."

The above description, and the preserved specimen from which our figure was taken, were obligingly furnished for the use of this work, by William Yarrell, Esq., of London.



THE STORMY PETREL,

STORM FINCH, LITTLE PETREL, OR MOTHER CAREY'S CHICKEN,

(*Procellaria pelagica*, Linn.—*L'Oiseau de Tempète*, Buff.)

Is the least of all the web-footed birds, measuring only about six inches in length, and thirteen in breadth. The bill is half an inch long, hooked at the tip; the nostrils tubular. The upper parts of the plumage are black, sleek, and glossed with bluish reflections: the brow, cheeks, and under parts, sooty brown, the rump, and some feathers on the sides of the tail, white: legs slender, black, and scarcely an inch and three quarters in length, from the knee joint to the end of the toes.

This bird resembles the Chimney Swallow in general appearance, in the length of its wings, and the swiftness of its flight. It is met with by navigators on every part of the ocean, diving, running on foot, or skimming

over the surface of the heavy rolling waves of the most tempestuous sea, quite at ease, and in security; and yet it seems to foresee and fear the coming storm, long before the seamen can discover any appearance of its approach; and this these little sure prognosticators make known by flocking together under the wake of the ship, as if to shelter themselves from it, or to warn the mariners, and prepare them to guard against the danger. They are silent during the day, and their clamorous piercing cry is heard only in the night. In the breeding season they betake themselves to the promontories, where, in the fissures of the rocks, they breed and conduct their young to the watery element as soon as they are able to crawl, and immediately lead them forward to roam, with themselves, over the trackless ocean.

Although it has been generally said that these birds are never seen but at sea, except during the period of incubation, yet many instances have occurred of their having been shot inland. Latham speaks of one which was shot at Sandwich, in Kent, in a storm of wind, among a flock of Hoopoes, in the month of January; of another shot at Walthamstow, in Essex; and of a third which was killed near Oxford. The late M. Tunstall, Esq., of Wycliffe, had one sent to him, which was shot near Bakewell, in Derbyshire; and the specimen from which the above figure and description were taken, was found dead in a field near Ripon, in Yorkshire, and obligingly sent to the author by Lieut.-Col. Dalton, late of the 4th Dragoons. It is probable that sickness, or the extreme violence of some hurricane, had driven these birds so far from their natural element.

Of the Mergus.

Birds of this genus have roundish slender bills, furnished at the end with a hard, horny, crooked nail; edges of the mandibles very sharply toothed, or serrated, and pointing inwards; nostrils small, sub-ovated, and placed near the middle of the bill: tongue rough, with hard indented papillæ, turned backward: legs short, feet webbed; toes long, and the outer ones about the same length as the middle: the head is small, but the quantity of soft silky feathers with which it is furnished, and which they can bristle up from the nape of the neck to the brow, gives it a large appearance. They are a broad, long-bodied, and flat-backed kind of birds, and swim very squatly on the water, the body seeming nearly submerged, with only the head and neck clearly seen. They are expert divers, remaining a long while under water, and getting to a great distance before they appear again. They fly near the surface of the water, and, notwithstanding the shortness of their wings, with great swiftness, though seldom to any great distance. They devour a large quantity of fish, particularly eels; and their pointed, sharp-toothed, and hooked bills are well calculated for holding fast their slippery prey, none of which, when once within their gripe, can escape.

The moult takes place once a year, but the mature males moult in the spring, the females and the young birds in autumn. The number of species, which formerly extended to six, has now been reduced to three.

THE GOOSANDER.

(*Mergus Merganser*, Linn.—*Le Harle*, Buff.)

The male generally weighs about four pounds, and measures in length two feet three inches, and in breadth, three feet two inches. The bill is slender, and turned a little upwards; it is three inches long from the hooked nail or tip to the corners of the mouth, but little more than two inches on the ridge; both mandibles are black on the upper and under parts, and crimson on the sides; they are sharply toothed on the edges, and on the inside of the upper, which is narrow, thin, and hard at the tip, there is a double row of smaller teeth: the tongue is furnished with a similar kind of double row, running along the middle, and edged with a kind of hairy border: the irides are commonly of a fine red colour, but in some dusky. The head is covered or crowned with a great quantity of feathers, which, when erected,

form a crest; at other times they are laid flatly down, and fall over the nape of the neck: these feathers are of a glossy bottle green; the cheeks, throat, and upper fore part of the neck are dull black; the lower part of the neck, the breast, belly, vent, and inner coverts of the wings, of a beautiful cream colour: the upper part of the back, and adjoining scapulars, are fine glossy black: the others bordering on the wing, white: the coverts at the setting on of the wing, black; the rest pure white: the secondary quills the same, narrowly edged with black; primaries dusky: the middle of the back and rump are ash colour; from the thighs to the sides of the tail, waved and freckled with ash and white: the tail consists of eighteen dark bluish grey feathers: the legs and feet are deep scarlet, like sealing-wax. Willoughby says—"It hath a huge bony labyrinth on the wind-pipe, just above the divarications; and the wind-pipe hath besides two swellings out, one above another, each resembling a powder puff."

The Goosander is an inhabitant of the cold northern latitudes, and seldom makes its appearance in the temperate or more southern climates, to which it is driven only by the inclemency of the weather, in severe winters, in search of those parts of rivers or lakes which are not bound up by the frost. It leaves this country early in the spring, and goes northward to breed, and is never seen during the summer months in any part of England; but in hard winters (which the appearance of these birds presages) they are common on the fresh water pools, rivers, and fens in the East Riding of Yorkshire, and on the fens of Lincolnshire. Their flesh is by some accounted rank and fishy; others say

that it is dry unpleasant food, and, in corroboration of this, quote the old vulgar proverb, "He who would regale the devil, might serve him with Merganser and Cormorant." The author, in some instances, has found these proverbs to be not well founded; but never having tasted of this particular species, he cannot hazard a contrary opinion.

The foregoing description was taken from a bird in full plumage, with which this work was favoured by Robert Pearson, Esq., of Newcastle, 20th March, 1800.

THE DUN-DIVER.

SPARLING FOWL, OR FEMALE GOOSANDER.

(*Mergus Castor*, Linn.—*Le Harle cendré, ou le Bievre*, Buff.)

The bill, from the tip to the corners of the mouth, is two inches and a quarter long, of a red colour, but darker on its ridge: the hooked horny nail of the upper mandible is blackish; the tip of the under one white: the head and upper part of the neck deep chesnut; the crest, the feathers of which are soft, very long, and pendent, is of a deeper shade of the same colour: the chin and upper part of the throat are white: the back, scapulars, coverts of the wings, rump, and sides of the body, are of a bluish ash or lead colour: the fore part of the neck, the breast, belly, and vent, are yellowish white; the bastard and primary quills dark brown: a large white patch or bar is formed on the

middle of the wing, by the tips of the greater coverts and the outer webs of six of the secondary quills; but those nearest to the body are of a hoary dark ash: the tail, which consists of fourteen feathers, is nearly of the same colour: the legs orange red.

We have hitherto expressed some doubts as to this bird being the female Goosander, seeing that all our contemporaries were at variance on the subject. Dr. Heysham, of Carlisle, was probably the first who, by dissection, removed some of the doubts in which this matter was involved: in his Catalogue of Cumberland Animals,* he says, "This has generally been considered as the female of the Goosander." "The following circumstances, which have come under my observation, however, render this opinion somewhat doubtful: 1st, The Dun-divers are far more numerous than the Goosanders. 2nd, The Dun-divers are all less than the Goosanders, (the largest I have seen being little more than three pounds) but of various sizes, some being under two pounds. 3rd, The crest of the Dun-diver is considerably longer than the crest (if it can be so called) of the Goosander. 4th, Dun-divers have been found, upon dissection, to be males. 5th, The neck of the largest Dun-diver, and which has proved to be a male, is nothing like so thick as the neck of the Goosander." "On the 26th of December, 1783, I dissected a Dun-diver, which was rather more than three pounds in weight; its length was twenty-seven inches, and its breadth thirty-five inches. It proved to be a male: the testes, though flacid, were

* See the additional ornaments to Hutchinson's History of Cumberland.

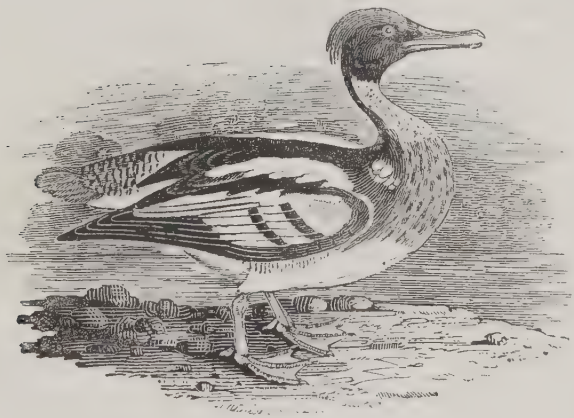
very distinct, and about half an inch in length. In the middle of January, 1786, I received two Dun-divers, both of which I dissected: the first was a small one, about two pounds in weight; it proved to be a female; the eggs were very distinct: the second was much larger, and weighed three pounds; its crest was longer, and its belly of a fine yellowish rose colour: it was a male, and the testes were beginning to grow turgid. I have dissected only one Goosander, and that proved to be a male. Therefore, until a Goosander be found, upon dissection, to prove a female, or two Goosanders to attend the same nest, the doubts respecting these birds cannot be satisfactorily removed."

Although Willoughby describes this as the female Goosander, yet he expresses his doubts of the matter, from its being, like that bird, furnished with a kind of large labyrinth, which, he says, is to be found in the males only of the Duck tribe, and whence he conjectures that this is also peculiar to all the males of the *Mergi*, and that all the females are without it; but he notices one of this family (which at Venice is called *Cokall*) in which this labyrinth, or enlargement of the windpipe, was wanting. Respecting the Dun-diver he further observes, that "the stomach of this bird is as it were a craw and a gizzard joined together. The upper part, resembling the craw, hath no wrinkles or folds in its inner membrane, but is only granulated with small papillary glandules, resembling the little protuberances on the third ventricle of a Beef, called the Manifold, or those on the shell of a Sea-urchin."

These discrepancies have been accounted for by Temminck, who says, that "the young males of the

first year appear in the livery of their mothers:" this is doubtless the reason why Dr. Heysham failed in actually reaching the truth, while he approached so very near to it by the only infallible route, dissection. The same able naturalist (Temminck) has furnished facilities of discriminating the females and young males of this species from those of the Red-breasted Merganser, points which have hitherto created very great difficulty. He says, "the females and the young males of the Goosander are distinguished by their greater size, but especially by the white spot on the wings, which in them is of an uniform colour, while in the Red-breasted Merganser, it is transversely barred with ash in the females, and blackish in the young males."

The above figure was drawn from one in full plumage and perfection, for which this work was indebted to Robert Pearson, Esq., of Newcastle, the 28th of February, 1801.



THE RED-BREASTED MERGANSER.

(*Mergus Serrator*, Linn.—*Le Harle huppé*, Buff.)

This bird measures one foot nine inches in length, and two feet seven in breadth, and weighs about two pounds. The bill, from the tip to the angles of the mouth, is three inches in length, slender, and of a rather roundish form, and like those of the rest of this genus, hooked at the tip, and toothed on the edges: the upper mandible is dark brown, tinged with green, and edged with red; the lower one wholly red; the irides are deep red: the head, long pendent crest, and upper part of the neck, are of a glossy violet black, changing in different lights to a beautiful gilded green: the rest of the neck and belly white: the breast rusty red, spotted with black on the front, and bordered on each side with five or six white feathers, edged with

black: the upper part of the back, glossy black; the lower, the rump, and sides, are prettily marked with transverse zigzag lines of brown and pale grey: the ridge of the wings, and adjoining coverts are dusky; the feathers nearest to the wings are white: the greater coverts, and some of the secondary quills, black and white; the others, and the scapulars, are also party-coloured of the same hue: the primary quills are black; some of those next to the body tipped with white, and others of them white on the upper half, and black to their points; the white spot on the wing barred in the male by two black lines. The tail is short, its colour brown: the legs and feet of a deep saffron red. These birds, both male and female, are said to differ much in their plumage; some having more white on them than others, and some also brighter colours, and more distinctly marked.

The female (which the author has not seen) is described as differing from the male in having only the rudiment of a crest, and in the white spot of the wing being crossed by only one transverse bar. Pennant says,—"The head and upper part of the neck are of a deep rust colour: throat white: fore part of the neck and breast marbled with deep ash colour: belly white: great quill feathers dusky: lower half of the nearest secondaries black; the upper white: the rest dusky: back, scapulars, and tail, ash coloured: the upper half of the secondary feathers white; the lower half black; the others dusky."

In a male of this species, which was shot at Sandwich, in Kent, Latham says,—"I observed that the feathers which compose the crest, were simply black;

also down the middle of the crown, as well as the space before the eye, and beneath the chin and throat; but in the rest of the neck the black had a gloss of green." He also describes it as having "a curious and large labyrinth," similar to those of other males of this genus, which have been noticed before.

The Red-breasted Merganser is not common in Britain, particularly in the southern parts of the island; but they are met with in great flocks at Newfoundland, Greenland, and Hudson's Bay, during the summer months; they are found also in varous other northern parts of the world, and in the Mediterranean sea.

THE SMEW.

WHITE NUN.

(*Mergus albellus*, Linn.—*Le petit Harle huppé, ou la Piette*, Buff.)

The Smew is about the size of a Wigeon: the bill is nearly two inches long, of a dusky blue, thickest at the base, and tapering into a more slender and narrow shape towards the point: it is toothed like those of the rest of this tribe: the irides are dark: on each side of the head, an oval-shaped black patch, glossed with green, is extended from the corners of the mouth over the eyes: under side of the crest black; the other parts of the head and neck white: the breast, belly, and vent are also white, excepting a curved black stroke, pointing forward from the shoulders on each side of the upper

part of the breast, which, on the lower part, has also similar strokes pointing the same way: the back, the coverts on the ridge of the wings and the primary quills are black: the secondaries and greater coverts black, tipped with white: the middle coverts and the scapulars white: the sides, under the wings to the tail, are agreeably variegated and crossed with dark waved lines. The tail consists of sixteen dark ash-coloured feathers; the middle ones about three inches and a half long, the rest gradually tapering off shorter on each side: the legs and feet are of a bluish lead colour. This species, which seldom visits this country except in very severe winters, is at once distinguished from the rest of the *Mergi* by its black and white piebald appearance, although the individuals vary from each other in the proportion and extent of those colours on their plumage.

The Red-headed Smew *(Mergus minutus)* had long been considered by some ornithologists as a distinct species; while others have maintained that it is the female of the Smew. It is now, however, ascertained to be the immature male of that bird.

THE LOUGH DIVER.

FEMALE SMEW.

The bill from the tip to the brow is little more than an inch; head and hinder part of the neck rusty chesnut; upper part, and sides of the breast, to the wings darkish ash, tipped with grey; shoulders and upper part of the back clouded with dusky and grey; lower part dusky towards the rump, and tipped with a lighter colour. The lesser coverts are white, with black and white tips, the greater the same, forming two bars across the wing; the tail consists of sixteen dark hoary grey feathers; scapulars ash grey; sides ash; belly and vent white.

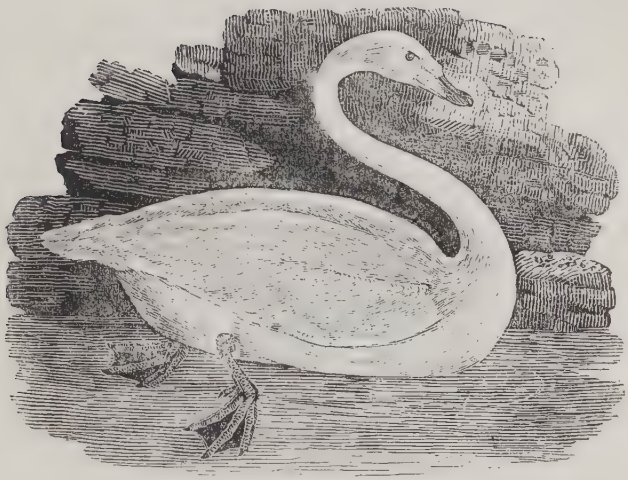
In January, 1820, during a severe frost, three of these birds made their appearance on the River Tyne, and were all killed at one shot; they were nearly alike. This figure was drawn from one of them, after it had been stuffed.

Of the Anas.

The bill of this genus is strong, broad, depressed, or flat, and commonly furnished with a joint on the upper mandible, and at the end with a nail; the edges of both mandibles divided into lamillæ or teeth: nostrils small and oval: tongue broad, edges, near the base, fringed: legs short, and feathered to the knee; feet webbed; the hind toe free, articulated high up on the tarsus, provided with a membrane, or the mere appearance of one; the middle toe the longest.

From the Swan downward to the Teal, they are all a clean-plumaged beautiful race of birds, and some of them exquisitely so. Those which have been reclaimed from a state of nature, and live dependent on man, are extremely useful to him: under his protection they breed in great abundance, and without requiring much of his time or care, lead their young to the pool almost as soon as they are hatched, where they instantly, with instinctive perception, begin to search for their food, which at first consists chiefly of weeds, worms, and insects; these they sift, as it were, from the mud, and for that purpose their bills are admirably adapted. When they are further advanced in life, they pick up the sodden scattered grain of the farm-yard, which, but for their assiduous searchings, would be lost. To them also are allotted the larger quantities of corn which are shaken by the winds from the over-ripened ears in the fields. On this clean and simple food they soon become fat, and their flesh is accounted delicious and nourishing.

The males, of nearly the whole of the Ducks, so far as we have been enabled by dissection to ascertain, are furnished with a labyrinth on the wind-pipe; these vary in size, shape, and conformation in different birds, and by which the distinct species are unerringly marked out.



THE WILD SWAN.

ELK, HOOPER, OR WHISTLING SWAN.

(*Anas Cygnus*, Linn.—*Le Cygne sauvage*, Buff.)

The Wild Swan measures five feet in length, above seven in breadth, and weighs from thirteen to sixteen pounds. The bill is four inches long from the tip to the brow, of a yellowish white from the base to the middle, and thence to the tip, black: the bare space from the bill over the eye and eye-lids is yellow: the whole plumage in adult birds is of a pure white, and, next to the skin, they are cloathed with a thick fine down: the legs are black.

This species generally keeps together in small flocks, or families, except in the pairing season, and at the setting in of winter. At the latter period they

assemble in multitudes, particularly on the large rivers and lakes of the thinly inhabited northern parts of Europe, Asia, and America; but when the extremity of the weather threatens to become insupportable, in order to shun the gathering storm, they shape their course, high in air, in divided and diminished numbers, in search of milder climates. In such seasons they are most commonly seen in various parts of the British isles, and in other more southern countries of Europe. The same is observed of them in the North American states. They do not, however, remain longer than till the approach of spring, when they again retire northward to breed. A few, indeed, drop short, and perform that office by the way, for they are known to breed in some of the Hebrides, the Orkney, Zetland, and other solitary isles; but these are hardly worth notice: the great bodies are met with in the large rivers and lakes of Kamtschatka, North America, Iceland, and Lapland. They are said to return to Iceland in flocks of about a hundred in the spring, and also to pour in upon that island from the north, in nearly the same manner, on their way southward in the autumn. The young which are bred there remain throughout the first year; and in August, when they are in moult, and unable to fly, the natives, taking advantage of this, kill them with clubs, shoot, and hunt them down with dogs, by which they are easily caught. The flesh is highly esteemed by them as a delicious food, as are also the eggs, which are gathered in the spring. The Icelanders, Kamtschatdales, and other natives of the northern world, dress their skins with the down on, sew them together, and make

them into garments of various kinds: the northern American Indians do the same, and sometimes weave the down as barbers weave the cawls for wigs, and then manufacture it into ornamental dresses for the women of rank, while the larger feathers are formed into caps and plumes to decorate the heads of their chiefs and warriors. They also gather the feathers and down in large quantities, and barter or sell them to the inhabitants of more civilized nations.

Buffon was of opinion that the Tame Swan had been derived originally from the wild species; but other naturalists entertained a contrary opinion, which they formed chiefly on the difference between them in the singular conformation of the windpipe. Willoughby says, "The windpipe of the Wild Swan, after a strange and wonderful manner, enters the breast bone in a cavity prepared for it, and is therein reflected, and after its egress at the divarication is contracted into a narrow compass by a broad and bony cartilage; then being divided into two branches, goes on to the lungs: these branches, before they enter the lungs, are dilated, and, as it were, swollen out into two cavities." Dr. Heysham corroborates the above, and adds, that the Wild Swan, in this particular, differs not only from the Tame Swan, but also from every other bird. The only observable external differences between the two species are in the markings of the bill, (which are figured in the subjoined head*) and in the Wild Swan's being of less bulk than the Mute or Tame kind.

* On examining the bill, a distinct joint is found in the middle of the protuberance on the upper mandible, by which the bird can open its gape, nearly the same as the under one. Many of the Anas genus have the same, either on the knob or hidden by the brow feathers.

Much has been said, in ancient times, of the singing of the Swan, and many beautiful and poetical descriptions have been given of its dying song. "No fiction of natural history, no fable of antiquity, was ever more celebrated, oftener repeated, or better received: it occupied the soft and lively imagination of the Greeks; poets, orators, and even philosophers, adopted it as a truth too pleasing to be doubted." "The dull insipid truth," however, is very different from such amiable and affecting fables, for the voice of the Swan, singly, is shrill, piercing, and harsh, not unlike the sound of a clarionet when blown by a novice in music. It is, however, asserted by those who have heard the united and varied voices of a numerous assemblage of them, that they produce a more harmonious effect, particularly when softened by the murmur of the waters.

At the setting in of frosty weather, the Wild Swans are said to associate in large flocks, and, thus united, to use every effort to prevent the water from freezing: this they accomplish by the continual stir kept up amongst them; and by constantly dashing it with their extended wings, they are enabled to remain as long as it suits their convenience, in some favourite part of a lake or river which abounds with their food.

The Swan is very properly entitled the peaceful Monarch of the Lake; conscious of his superior strength, he fears no enemy, nor suffers any bird, however powerful, to molest him; neither does he prey upon any one. His vigorous wing is as a shield against the attacks even of the Eagle, and the blows from it are said to be so powerful as to stun or kill the fiercest of his foes. The Wolf or the Fox may surprise him in the dark, but

their efforts are vain in the day. His food consists of the grasses and weeds, and the seeds and roots of plants, which grow on the margins of the water, and of the myriads of insects which skim over, or float on its surface; also occasionally of the slimy inhabitants within its bosom.

The female makes her nest of the withered leaves and stalks of reeds and rushes, and lays commonly six or seven thick-shelled white eggs: she is said to sit upon them six weeks before they are hatched. Both male and female are very attentive to their young, and will suffer no enemy to approach them.

THE MUTE SWAN.

TAME SWAN.

(*Anas Olor*, Linn.—*Le Cygne*, Buff.)

The plumage of this species is of the same snowy whiteness as that of the Wild Swan, and the bird is covered next the body with the same kind of fine close down; but it greatly exceeds the Wild Swan in size, weighing about twenty-five pounds, and measuring more in the length of the body and extent of the wings. This also differs in being furnished with a projecting, callous, black tubercle, or knob on the base of the

upper mandible, and in the colour of the bill, which is red, with black edges and tip: the naked skin between the bill and the eyes is also of the latter colour: in the Wild Swan this bare space is yellow. There is nothing peculiar in the structure of the windpipe, which enters the lungs in a straight line.

The manners and habits are much the same in both kinds, particularly when they are in a wild state; for indeed this species cannot properly be called domesticated; they are only, as it were, partly reclaimed from a state of nature, and invited by the friendly and protecting hand of man to decorate and embellish the artificial lakes and pools which beautify his pleasure grounds. On these the Swan cannot be accounted a captive, for he enjoys all the sweets of liberty. Placed there, as he is the largest of all the British birds, so is he to the eye the most pleasing and elegant. What in nature can be more beautiful than the grassy margined lake, hung round with the varied foliage of the grove, when contrasted with the pure resplendent whiteness of the majestic Swan, wafted along with erected plumes by the gentle breeze, or floating, reflected on the glossy surface of the water, while he throws himself into numberless graceful attitudes, as if desirous of attracting the admiration of the spectator!

The Swan, although possessed of the power to rule, yet molests none of the other water birds, and is singularly social and attentive to those of his own family, which he protects from every insult. While they are employed with the cares of the young brood, it is not safe to approach near them, for they will fly upon any stranger, whom they often beat to the ground by repeated blows; and they have been known by a stroke

of the wing to break a man's leg. But, however powerful they are with their wings, yet a slight blow on the head will kill them.

The Swan, for ages past, has been protected on the river Thames as royal property; and it continues at this day to be accounted felony to steal their eggs. "By this means their increase is secured, and they prove a delightful ornament to that noble river." Latham says, "In the reign of Edward IV., the estimation they were held in was such, that no one who possessed a freehold of less than the clear yearly value of five marks, was permitted even to keep any." In those times, hardly a piece of water was left unoccupied by these birds, as well on account of the gratification they gave to the eye of their lordly owners, as that which they also afforded when they graced the sumptuous board at the splendid feasts of that period: but the fashion of those days is passed away, and Swans are not nearly so common now as they were formerly, being by most people accounted a coarse kind of food, and consequently held in little estimation: but the Cygnets (so the young Swans are called) are still fattened for the table, and are sold very high, commonly for a guinea each, and sometimes for more: hence it may be presumed they are better food than is generally imagined.

This species is said to be found in great numbers in Russia and Siberia, as well as further southward, in a wild state. They are, without an owner, common on the river Trent, and on the salt-water inlet of the sea near Abbotsbury, in Dorsetshire: they are also met with on other rivers and lakes in different parts of the British isles.

It is the generally received opinion that the Swan lives to a very great age, some say a century, and others have protracted their lives to three hundred years! Strange as this may appear, there are who credit it: the author, however, does not scruple to hazard an opinion, that this over-stretched longevity originates only in traditionary tales, or in idle, unfounded hearsay stories; as no one has yet been able to say, with certainty, to what age they attain.

The female makes her nest, concealed among the rough herbage, near the water's edge: she lays from six to eight large white eggs, and sits on them about six weeks (some say eight weeks) before they are hatched. The young do not acquire their full plumage till the second year.

It is found by experience that the Swan will not thrive if kept out of the water: confined in a court yard, he makes an awkward figure, and soon becomes dirty, tawdry, dull, and spiritless.

CYGNUS BEWICKII.

(OF WINGATE.)

THIS species is about one third less than the Hooper *(Cygnus ferus)* at the same age. Length four feet two inches, breadth six feet nine inches: the bill is about three inches long: the protuberance or knob at the base of the upper mandible pale orange; from thence to the tip black: nostrils oblong and opaque: irides orange yellow. The whole plumage is of a pure white, except the fore part of the head, which is spotted with rust colour. The tail is wedge-shaped, and consists of twenty feathers. Legs, toes, and claws black.

In a paper sent by Mr. Yarrell to the Linnean Society, illustrated by several drawings, he observes, —"In anatomical structure, the new species differs much more decidedly from the Hooper than in its external characters. The principal difference is in the trachea, which forms one of the best distinctions in the separation of nearly allied species throughout this numerous family."

Mr. Selby says,—"From the several specimens ascertained to have been killed in England, it would appear that this species has been in the habit of visiting our island for an indefinite period, though probably not in such numbers as the common Hooper. Its near affinity and close external resemblance to that species have, no doubt, occasioned it to be long confounded with it."

THE SWAN GOOSE,

CHINESE, SPANISH, GUINEA, OR CAPE GOOSE.

(*Anas Cygnoides*, Linn.—*L'Oie de Guinée*, Buff.)

Is more than three feet in length, and of a size between the Swan and the Common Goose: it is distinguished from others of the Goose tribe by its upright and stately deportment, by having a large knob on the base of the upper mandible, and a skin, almost bare of feathers, hanging down like a pouch, or a wattle, under the throat:* a white line or fillet is extended from the corners of the mouth over the front of the brow: the base of the bill is orange: irides

* The bird from which the above figure was taken, was without this appendage.

reddish brown: a dark brown or black stripe runs down the hinder part of the neck, from the head to the back: the fore part of the neck, and the breast, are yellowish brown: the back, and all the upper parts, brownish grey, edged with a lighter colour: the sides, and the feathers which cover the thighs, are clouded nearly of the same colours as the back, and edged with white: belly white: legs orange.

It is said that these birds originally were found in Guinea only: now they are become pretty common, in a wild as well as a domesticated state, both in warm and in cold climates.

Tame Geese of this species, like other kinds, vary much, both in the colour of the bill, legs, and plumage, as well as in size; but they all retain the knob on the base of the upper mandible, and rarely want the pouch or wattle under the gullet. They are kept by the curious in various parts of England, and are more noisy than the common Goose: nothing can stir, in the night or day, without their sounding the alarm, by their hoarse cacklings and shrill cries. They breed with the Common Goose, and their offspring are as prolific as those of any other kind. The female is smaller than the male: "the head, neck, and breast are fulvous; paler on the upper part: the back, wings, and tail, dull brown, with pale edges: belly white: in other respects they are like the male, but the knob over the bill is smaller."

THE CRAVAT GOOSE.

CANADA GOOSE.

(*Anas Canadensis*, Linn.—*L'Oie à Cravate*, Buff.)

This is less than the Swan Goose, but taller and longer than the Tame Goose. Average weight about nine pounds; length about three feet six inches; bill dark, and two inches and a half long: irides hazel: head and neck black, with a crescent-shaped white band on the throat, which tapers off to a point on each side below the cheeks, to the hinder part of the head: the whiteness of this cravat is heightened by its contrast with the dark surrounding plumage; this mark also distinguishes it from others of the Goose tribe. All the upper parts of the plumage, the breast, and a

portion of the belly, are of a dull brown, sometimes mixed with grey, and each feather is margined with a lighter colour: the lower part of the neck, the belly, vent, and upper and under tail coverts, pure white: quills and tail black: legs dingy blue.

This is another useful species which has been reclaimed from a state of nature, and domesticated and multiplied in many parts of Europe, particularly in France and Germany; but is rather uncommon in England. The above figure was taken from a specimen presented to this work by Mr. Henry Mewburn, of St. Germain's, Cornwall; the bird was shot there in 1819.* It is as familiar, breeds as freely, and is in every respect as valuable as the Common Goose: it is also accounted a great ornament on ponds near gentlemens' seats. Buffon says, "Within these few years, many hundreds inhabited the great canal at Versailles, where they lived familiarly with the Swans: they were oftener on the grassy margins than in the water. There is at present a great number of them on the magnificent pools that decorate the charming gardens of Chantilly." The wild stock whence these birds were taken are found in the northern parts of America; they are one of those immense families, which, when associated with others of the same genus, are said, at certain seasons, to darken the air like a cloud, and to spread themselves over the lakes and swamps in innumerable multitudes.

* Great numbers of these Geese were driven from their haunts during the severe snow-storm in January and February, 1814; they were taken upon the sea shore, near Hartlepool, and divided among the farmers in the neighbourhood, and bred with their domestic geese, no pains having been taken to keep the breed pure.

Pennant, in his Arctic Zoology, gives the following interesting account of the mode of taking the Canada Goose in Hudson's Bay.

" The English of Hudson's Bay depend greatly on Geese, of these and other kinds, for their support; and, in favourable years, kill three or four thousand, which they salt and barrel. Their arrival is impatiently attended; it is the harbinger of the spring, and the month named by the Indians the *Goose* moon. They appear usually at our settlements in numbers, about St. George's day, O. S., and fly northward to nestle in security. They prefer islands to the continent, as further from the haunts of men. Thus Marble Island was found, in August, to swarm with Swans, Geese, and Ducks; the old ones moulting, and the young at that time incapable of flying.

" The English send out their servants, as well as Indians, to shoot these birds on their passage. It is in vain to pursue them: they therefore form a row of huts made of boughs, at musket-shot distance from each other, and place them in a line across the vast marshes of the country. Each hovel, or, as they are called, *stand*, is occupied by only a single person. These attend the flight of the birds, and, on their approach, mimic their cackle so well, that the Geese will answer, and wheel and come nearer the stand. The sportsman keeps motionless, and on his knees, with his gun cocked, the whole time; and never fires till he has seen the eyes of the Geese. He fires as they are going from him, then picks up another gun that lies by him, and discharges that. The Geese which he has killed, he sets up on sticks as if alive, to decoy others; he also

makes artificial birds for the same purpose. In a good day (for they fly in very uncertain and unequal numbers) a single Indian will kill two hundred. Notwithstanding every species of Goose has a different call, yet the Indians are admirable in their imitation of every one.

"The vernal flight of the Geese lasts from the middle of April until the middle of May. Their first appearance coincides with the thawing of the swamps, when they are very lean. The autumnal, or the season of their return with their young, is from the middle of August to the middle of October. Those which are taken in this latter season, when the frosts usually begin, are preserved in their feathers, and left to be frozen for the fresh provisions of the winter stock. The feathers constitute an article of commerce, and are sent to England."

THE RED-BREASTED GOOSE.

SIBERIAN GOOSE.

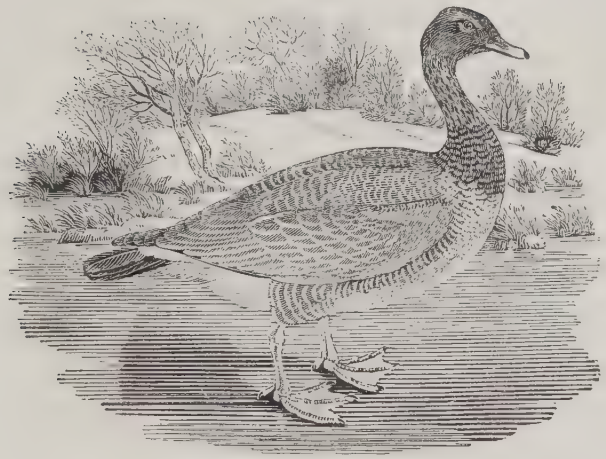
(*Anas ruficollis*, Tem.—*L'Oie a Cou roux*, Buff.)

Measures above twenty inches in length, and three feet ten in breadth. The bill is short, of a brown colour, with the nail black: irides yellowish hazel: cheeks and brow dusky, speckled with white: a white spot occupies the space between the bill and the eyes, with a black stripe beneath it, and is bounded above, on each side of the head, by a black line which falls down the hinder part of the neck towards the back: the chin, throat, and crown of the head are also black: two stripes of white fall down from behind each eye, on the sides of

the neck, and meet in the middle: the other parts of the neck, and the upper part of the breast, deep rusty red, and the latter terminated by two narrow bands of white and black: back and wings dusky; the greater coverts edged with grey: sides and lower part of the breast, black; belly, upper and under tail coverts, white: legs dusky.

This beautiful species is a native of Russia and Siberia, whence they migrate southward in the autumn, and return in the spring: they are said to frequent the Caspian Sea, and are supposed to winter in Persia. They are very rare in this country, only three of them (so far as our own knowledge extends) having ever been met with in it, and those all by the late M. Tunstall, Esq., of Wycliffe, in Yorkshire, in whose valuable museum the first of these birds, in high preservation, was placed.* It was shot near London in the beginning of the hard frost in the year 1766; and another of them was, about the same time, taken alive near Wycliffe, and kept there for several years in a pond among the Ducks, where it became quite tame and familiar. Mr. Tunstall informed Mr. Latham of these particulars, and also mentioned a third of the same kind, which had been shot in some other part of the kingdom. They are said to be quite free from any fishy taste, and are highly esteemed for the table.

* The foregoing figure was taken from this specimen, now in the Newcastle Museum.



THE GREY LAG GOOSE,

WILD GOOSE,

(*Anas Anser ferus*, Linn.—*L'Oie sauvage*, Buff.)

Generally weighs about ten pounds, and measures two feet nine inches in length, and five in breadth. The bill is thick at the base, tapers towards the tip, and is of a yellowish red colour, with the nail white: the head and neck are of a cinereous brown, tinged with dull yellow, and from the separations of the feathers, the latter appears striped downwards: the upper part of the plumage is of a deep brown, mixed with ash-grey; each feather is lighter on the edges, and the lesser coverts are tipped with white: the webs of the primary quills are grey, the tips black: the secondaries black, edged with white: the breast and belly are

crossed and clouded with dusky and ash on a whitish ground; and the tail-coverts and vent are of a snowy whiteness: the middle feathers of the tail are dusky, tipped with white; those adjoining more deeply tipped, and the exterior ones nearly all white: legs pale red.

This species is common in this country, and although large flocks of them, well known to the curious, in all the various shapes which they assume in their flight,* are seen regularly migrating southward in the autumn, and northward in the spring,† yet several of them are known to remain and breed in the fens of Lincolnshire and Cambridgeshire, and, it is said, in various other parts of Great Britain. Pennant says, they reside in the fens the whole year, breed there, and hatch about eight or nine young ones, which are often taken, easily

* This elevated and marshalled flight of the Wild Geese seems dictated by geometrical instinct: shaped like a wedge, they cut the air with less individual exertion; and it is conjectured, that the change of its form from an inverted V, to an A, an L, or a straight line, is occasioned by the leader of the van's quitting his post at the point of the angle through fatigue, dropping into the rear, and leaving his place to be occupied by another.

† A gentleman in the county of Durham, one morning in the month of April, observed a flock of Wild Geese going northward, in the line of two objects whose distance he knew to be four miles: he found by his watch the exact time they were in flying this distance; from which he calculated, that if they continued to fly at the same rate for twelve hours, they would be at the Orkneys by sun-set, which is twenty-five miles an hour. But it is not probable that these birds ever migrate from the fens in Cambridgeshire, &c., to the Orkneys, or other places where they breed, in one day, or at one flight; for great numbers of them are known to stop for several days, both in going and coming back again, at the mouth of the Tees, Prestwick-Car, the haughs of the river Till, near Wooler, in Northumberland, and at some places in the Merse, in Scotland.

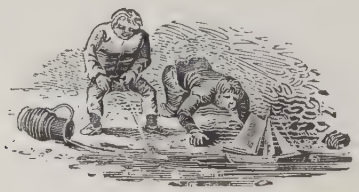
made tame, and much more esteemed for the excellent flavour of their flesh than the domestic Goose: he adds, "The old Geese which are shot, are plucked and sold in the market as fine tame ones, and readily bought, the purchaser being deceived by the size; but their flesh is coarse."*

This species is widely and numerously spread over all the various parts of the northern world, whence some flocks of them migrate a long way southward in the winter. Latham says, they seem to be general inhabitants of the globe, are met with from Lapland to the Cape of Good Hope,—are frequent in Arabia, Persia, and China, as well as indigenous to Japan,—and on the American continent from Hudson's Bay to South Carolina. He also observes that our voyagers have met with them in the Straits of Magellan, Port Egmont in the Falkland Islands, Terra del Fuego, and New Holland. There can be little doubt about the territories assigned to them for their summer residences and breeding places; the lakes, swamps, and dreary morasses of Siberia, Lapland, Iceland, and the unfrequented or unknown northern regions of America seem set apart for that purpose, where, with multitudes of other kinds, in undisturbed security, they rear their young, and are amply provided with a variety of food, a large portion of which must consist of the larvæ of gnats, which swarm in those parts, and the myriads of

* This is the case with all very old Geese, both tame and wild; but the flesh of a middle-aged one of the latter sort, in the spring of the year, when the bird is in full feather, is very tender, finely flavoured, and nowise like that of the tame Goose either in taste or colour.

insects that are fostered by the unsetting sun. Pennant says, that these Wild Geese appear in Hudson's Bay early in May, as soon as the ice disappears;—collect in flocks of twenty or thirty, stay about three weeks, then separate in pairs, and take off to breed; that about the middle of August they return to the marshes with their young, and continue there till September. Some of them are caught and brought alive to the factories, where they are fed with corn, and thrive greatly.

Wild Geese are very destructive to the growing corn in the fields where they happen to halt in their migratory excursions. In some countries they are caught at those seasons in long nets, to which they are decoyed by tame ones placed there for that purpose. Many other schemes are contrived to take these wary birds; but as they feed only in the day-time, and betake themselves to the water at night, the fowler must exert his utmost care and ingenuity in order to accomplish his ends: all must be planned in the dark, and every trace of suspicion removed; for nothing can exceed the vigilant circumspection and acute ear of the sentinel, who, placed on some eminence, with outstretched neck surveys every thing that moves within the circle of the centre on which he takes his stand, and the instant he sounds the alarm, the whole flock betake themselves to flight.



THE BEAN GOOSE

(*Anas Segetum*, Gm. Linn.)

Differs very little in its general appearance from the Grey Lag Goose, the chief distinction between them being in its having a callous knob on the wrist of the wing, and in the bill, which in this is small, much compressed near the end, whitish, and sometimes of a pale red in the middle, and black at the base and nail: the latter is shaped somewhat like a horse-bean, from which the species has obtained the name of Bean Goose. Length two feet seven inches; breadth four feet eleven; weight about six pounds and a half. Head and neck of a cinereous brown, tinged with ferruginous: breast and belly dirty white, clouded with cinereous; sides and scapulars dark ash, edged with white: back plain ash: coverts of the tail white: the folded wings extend beyond the tail: lesser coverts of the wings light grey, nearly white; middle deeper, tipped with white: primaries and secondaries grey, tipped with black: feet and legs saffron colour; claws black.

These birds arrive in the fen counties in the autumn, and take their departure in May. They are said to alight in the corn fields, and to feed much upon the green wheat, while they remain in England. They are reported to breed in great numbers in the Isle of Lewis, and no doubt on others of the Hebrides, and also at Hudson's Bay.*

* Temminck calls this the Common or Wild Goose; the Grey Lag Goose the Grey Goose; and says the latter breeds in temperate climates, the former in the arctic regions.

THE TAME GOOSE.

(*Anas Anser*, Linn.—*L'Oie domestique*, Buff.)

To describe the varied plumage and the economy of this well-known valuable domestic fowl, may seem to many a needless task; but to others, unacquainted with rural affairs, it may be interesting. Their predominant colours are white and grey, with shades of ash blue, and brown: some of them are yellowish, others dusky, and many are found to differ very little in appearance from the wild kind before described—the original stock whence, in early times, they were all derived. The only permanent mark, which all the grey ones still retain, like those of the wild kind, is the white ring which surrounds the root of the tail. They are generally furnished with a small tuft on the

head; and the most usual colour of the males (Gander or Steg) is pure white: the bills and feet in both males and females are of an orange red. By studied attention in the breeding, two sorts of these Geese have been obtained: the less are by many esteemed as being more delicate eating; the larger are by others preferred on account of the bountiful appearance they make upon the festive board. The weight of the latter kind is generally between nine and fifteen pounds; but instances are not wanting, where they have been fed to upwards of twenty pounds: this is, however, to sacrifice the flavour of the food to the size and appearance of the bird; for they become disgustingly fat and surfeiting, and the methods used to cram them up are unnatural and cruel. It is not, however, altogether on account of their use as food that they are valuable; their feathers, their down, and their quills,* have long been considered as articles of more importance, and from which their owners reap more advantages. In this respect the poor creatures have not been spared: urged by avarice, their inhuman masters appear to have ascertained the exact quantity of plumage of which they can bear to be robbed, without being deprived of life.

* "An English archer bent his bow,
"Made of a trusty tree,—
"An arrow of a cloth yard long,
"Unto the head drew he:

"Against Sir Hugh Montgomery
"So right his shaft he set,
"The grey Goosewing that was thereon
"In his heart's blood was wet."

Chevy Chace.

Pennant, in describing the methods used in Lincolnshire, in breeding, rearing, and plucking Geese, says, "they are plucked five times in the year: first at Lady-day for the feathers and quills; this business is renewed for the feathers only, four times more between that and Michaelmas:" he adds, that he saw the operation performed even upon Goslings of six weeks old, from which the feathers of the tails were plucked; and that numbers of the Geese die when the season afterwards proves cold. But this unfeeling greedy business is not peculiar to one county, for much the same is practised in others. The care and attention bestowed upon the brood Geese, while they are engaged in the business of incubation, in the month of April, is nearly the same every where: wicker pens are provided for them, placed in rows, and tier above tier, not uncommonly under the same roof with their owner. Some place water and corn near the nests; others drive them to the water twice a-day, and replace each female upon her own nest as soon as she returns. This business requires the attendance of the Gozzard (Goose-herd) a month at least, in which time the young are brought forth: as soon afterwards as the brood are able to waddle along, they are, together with their dams, driven to the contiguous loughs, and fens or marshes, on whose grassy-margined pools they feed and thrive, without requiring any further attendance until the autumn. To these marshes, which otherwise would be unoccupied, (except by wild birds) and be only useless watery wastes, we are principally indebted for so great a supply of the Goose; for in almost every country where

lakes and marshes abound, the neighbouring inhabitants keep as many as suit their convenience, and in this way immense numbers annually attain to full growth and perfection. But in no part of the world are such numbers reared as in the fens of Lincolnshire, where it is said to be no uncommon thing for a single person to keep a thousand old Geese, each of which, on an average, will bring up seven young ones. So far those only are noticed which may properly be called the larger flocks, by which particular watery districts are peopled; and, although their aggregate numbers are great, yet they form only a part of the large family: those of the farm-yard, taken separately, appear as small specks, on a great map; but when they are gathered together, and added to those kept by almost every cottager throughout the kingdom, the immense whole will appear multiplied in a ratio almost incalculable. A great part of those which are left to provide for themselves during the summer, in the solitary distant waters, as well as those which enliven the village green, are put into the stubble fields after harvest, to fatten upon the scattered grain: and some are penned up for this purpose, by which they attain to greater bulk; and it is hardly necessary to observe, that they are then poured in weekly upon the tables of the luxurious citizens of every town in the kingdom. But these distant and divided supplies seem trifling when compared with the multitudes which, in the season, are driven in all directions into the metropolis:* the former appear only like the scanty waterings of the

* In ancient times they were driven in much the same way, from the interior of Gaul to Rome.

petty streamlet; the latter, like the copious overflowing torrent of a large river. To the country market towns they are carried in bags and panniers; to the great centre of trade they are sent in droves of many thousands.* To a stranger it is a most curious spectacle to view these hissing, cackling, gabbling, but peaceful armies, with grave deportment, waddling along (like other armies) to certain destruction. The drivers are each provided with a long stick, at one end of which a red rag is tied as a lash, and a hook is fixed at the other: with the former, of which the Geese seem much afraid, they are excited forward; and with the latter, such as attempt to stray, are caught by the neck and kept in order: or if lame, they are put into an *hospital cart*, which usually follows each large drove. In this manner they perform their journies from distant parts, and are said to get forward at the rate of eight or ten miles in a day, from three in the morning till nine at night: those which become fatigued are fed with oats, and the rest with barley.

It is universally believed that the Goose lives to a great age, and particular instances are recorded by ornithologists which confirm the fact: some are mentioned which have been kept seventy years; and Willoughby notices one which lived eighty years. They are, however, seldom permitted to live out their natural life, being sold, with the younger ones, long before they approach that period. The old ones are called

* In an article which Mr. Latham has copied from the St. James's Chronicle of September 2nd, 1783, it is noticed, that a drove of about nine thousand Geese passed through Chelmsford, on their way to London, from Suffolk.

cagmags, and are bought only by novices in market-making; for, from their toughness, they are very unfit for the table.

The Tame Goose lays from seven to twelve eggs, and sometimes more: these the careful housewife divides equally among her brood Geese, when they begin to sit. Those which lay a second time in the course of the summer, are seldom, if ever, permitted to have a second hatching; but the eggs are used for household purposes. In some countries the domestic Geese require much less care and attendance than those of this country. Buffon, in his elegant and voluminous Ornithology, in which nothing is omitted, gives a particular detail of their history and economy every where: he informs us, that among the villages of the Cossacks, subject to Russia, on the river Don, the Geese leave their homes in March or April, as soon as the ice breaks up, and the pairs joining each other, take flight in a body to the remote northern lakes, where they breed and constantly reside during the summer; and that on the beginning of winter, the parent birds, with their multiplied young progeny, all return, and divide themselves, every flock alighting at the door of the respective place to which it belongs.

The Goose has for many ages been celebrated on account of its vigilance. The story of their saving Rome by the alarm they gave, when the Gauls were attempting the capitol,* is well known, and was probably the first time of their watchfulness being recorded; and on that account, they were afterwards held in the

* As the poet sings—

"Et servaturis vigili Capitolia voce Anseribus."

highest estimation by the Roman people. It is certain that nothing can stir in the night, nor the least or most distant noise be made, but the Geese are roused, and immediately begin to hold their cackling converse; and on the nearer approach of apprehended danger, they set up their more shrill and clamorous cries. It is on account of this property that they are esteemed by many persons as the most vigilant of all sentinels, when placed in particular situations.

THE WHITE-FRONTED WILD GOOSE,

LAUGHING GOOSE,

(Anas albifrons.—L'Oie rieuse, Buff.)

Measures two feet four inches in length, and four feet six in the extended wings, and weighs about five pounds. Bill thick at the base, of a yellowish red; nail white; from the base of the bill and corners of the mouth, a white patch is extended over the forehead: rest of the head, neck, and the upper parts of the plumage in some specimens are dark brown, in others they vary to a lighter brown, and each feather is margined more or less with that colour: the primary and secondary quills are of the same, but much darker; and the wing coverts are tinged with ash: breast and belly dirty white, and barred with irregular patches of very dark brown, tipped with lighter shades of that colour;

the tail hoary ash-coloured brown, and surrounded with white at the base: the legs yellow.

These birds form a part of those vast tribes which swarm about Hudson's Bay, and the north of Europe and Asia, during the Summer months, and are but thinly scattered over the other quarters of the world. They visit the fens and marshy places in England, in small flocks, in the winter months, and disappear about the beginning of March. It is said that they never feed on the corn fields, but confine themselves wholly to such wilds and swamps as are constantly covered with water.

THE SPUR-WINGED GOOSE.

(*Anas Gambensis*, Linn.—*L'Oie armée*, Buff.)

The bill is reddish yellow, with a jointed protuberance on the base of the upper mandible. The upper part of the head and neck are dingy brown; the auriculars and sides of the throat are white, spotted with brown; the lower part of the neck, sides of the breast, and all the upper plumage appear black, but this colour is lost, particularly in the scapulars and tertials, which are most resplendently bronzed and glossed with brilliant green, and most of the outer webs of the other feathers partake of the same hue; on the bend of the wing or wrist is placed a strong white horny spur turning upwards, about five-eighths of an inch in length, and pointing rather inwards; the whole of the edges of the wing from the *alula spuria* to the elbow

and shoulder are white, all the under parts the same. This beautiful bird is nearly of the bulk of the Wild Goose, but its legs and toes are somewhat longer, and of a red or orange yellow.

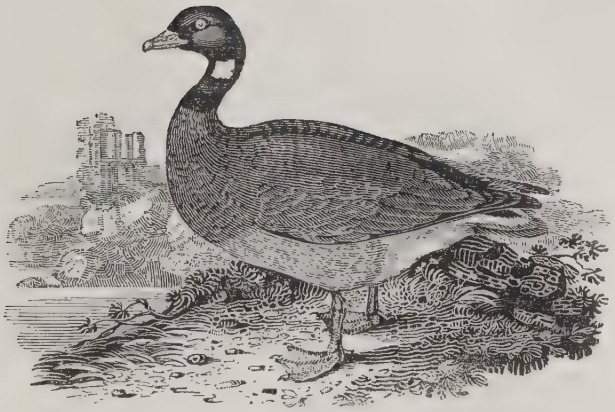
This species has not before been noticed as a British bird. The above figure was taken from the skin, with the head and legs, of a male sent to this work by Mr. Henry Mewburn, of St. Germain's, Cornwall. The bird had been shot near that place, in June, 1821.

THE EGYPTIAN GOOSE.

(*Anas Ægyptiaca*, Linn.—*L'Oie d'Egypte*, Buff.)

Length two feet two inches and five-eighths, breadth four feet four inches, weight six pounds. The bill is reddish, and, including a protuberance on the base of the upper mandible, is two inches in length; nail black, nostrils dusky, irides pale yellow; a dark reddish chesnut patch surrounds the eyes and the base of the bill; the crown of the head and the cheeks are of a dull dirty white, mixed with indistinct spots of rusty brown: the rest of the head, from the nape downwards over the whole neck, is of a dingy chesnut, mixed and tipped with a lighter colour: on the breast is a reddish chesnut patch, the upper part of which, with the shoulders, scapulars, and sides, are pale brownish yellow, beautifully marked or pencilled with dusky waved lines: the lower part is less distinctly marked, and

appears of an ash grey: the belly white: the wing coverts are white; the greater ones crossed or barred with a black line about half an inch from their tips: the secondary quills are clear reddish chesnut; those of the primaries which join them, forming the speculum, which in varied lights are either of a resplendent green or purple: the rest of the first quills, the back, and tail are black: the under coverts of the latter pale chesnut: the legs are long, and, as well as the webs, are of a pale flesh colour: nails black. Latham describes this species as being of the size of the common Goose; our specimen is not nearly so large. He also says, "It has on the bend of the wing a blunt spur, half an inch in length." In this he has been misled, for it is only a prolongation of the third bone of the wing, and not a spur. A pair of these birds, male and female, were kept by Sir Charles Loraine, Bart., on a pond at Kirkharle; but a hard frost, in January, 1827, obliged them to quit this abode, probably in search of open water, when the latter bird (by mistake) was shot, and the preserved specimen was obligingly lent by Sir Charles for the use of this work. They passed under the denomination of Egyptian Geese; but what the name ought to be is one of the puzzling desiderata of ornithologists, and much uncertainty prevails respecting the proper nomenclature of this bird, as well as that of the Anas rutila and Anas casarca. It is to be regretted that the various genera of the good and great Linnæus are not separated into families or sections, as this would not bewilder what he has so well done, nor throw any confusion into his system. This amendment ought (most properly) to originate with the learned members of the Linnæan Society.



THE BRENT GOOSE.

(*Anas Bernicla*, Linn.—*Le Cravant*, Buff.)

This is of nearly the same shape and size as the Bernacle, from which it differs in the colour of its plumage, being mostly of an uniform brown, the feathers edged with ash: the upper parts, breast, and neck, are darker than the belly, which is more mixed and dappled with paler cinereous and grey: the head and upper half of the neck are black, excepting a white patch on each side of the latter, near the throat: the lower part of the back and rump are also black: the tail coverts above and below, and the vent, white: tail, quills, and legs dusky: the bill is dark, rather of a narrow shape, and only about an inch and a half long: the irides are light hazel. In the females and the younger birds, the plumage is not so distinctly marked, and the white spots on the sides of the neck are often

mixed with dusky: but such varyings are discernible in many other birds, for it seldom happens that two are found exactly alike.

The Brent Geese, like other species of the same genus, quit the rigours of the north in winter, and spread themselves southward in greater or less numbers, impelled forward, according to the severity of the season, in search of milder climates. They are then met with on the British shores, and spend the winter months in the rivers, lakes, and marshes in the interior parts, feeding mostly upon the roots, and also on the blades of the long coarse grasses and plants which grow in the water: but indeed their varied modes of living, as well as their other habits and propensities, and their migrations, haltings, breeding places, &c., do not differ materially from those of the other numerous families of the Wild Geese. Buffon gives a detail of the devastations which they made, in the hard winters of 1740 and 1765, upon the corn fields on the coast of Picardy, in France, where they appeared in such immense flocks, that the people were literally raised (*en masse* we suppose) in order to attempt their extirpation, which, however, it seems they could not effect, and a change in the weather only, caused these unwelcome visitants to depart. Capt. Sabine says they breed in great numbers on the islands of the Polar Sea.

The foregoing figure was drawn from one shot at Axwell Park, near Newcastle upon Tyne. There was a stuffed specimen in the Wycliffe museum, which slightly varied in the markings of the plumage.

THE BERNACLE.

CLAKIS, OR TREE GOOSE.

(*Anas Erythropus*, Linn.—*La Bernache*, Buff.)

Weighs about five pounds, and measures more than two feet in length, and nearly four and a half in breadth. The bill, from the tip to the corners of the mouth, is scarcely an inch and a half long, black, and crossed with a pale reddish streak on each side: a narrow black line passes from the bill to the eyes; the irides are brown: the head is small, and as far as the crown, together with the cheeks and throat, white: the rest of the head and neck, to the breast and shoulders, is black. The upper part of the plumage is prettily marbled or barred with blue grey, black, and white: the feathers of the back are black, edged with white, those of the wing coverts and scapulars, blue grey, bordered with black near their margins, and edged with white:

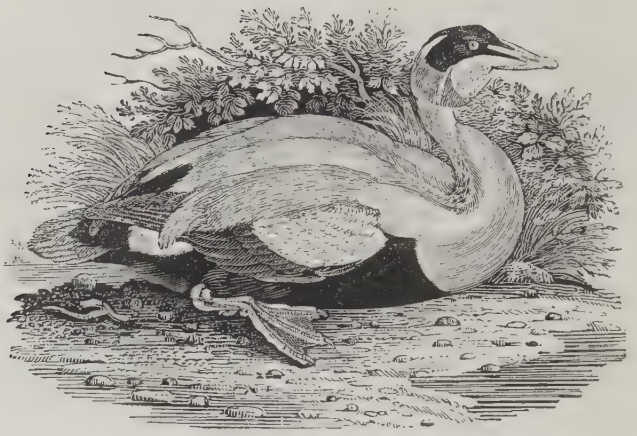
the quills black, edged a little way from the tips with blue grey: the under parts and tail coverts white: the thighs are marked with dusky lines or spots, and are black near the knees: the tail is black, and five inches and a half long: the legs and feet dusky, very thick and short, and have a stumpy appearance.

In severe winters, these birds are not uncommon in this kingdom, particularly on the northern and western parts, where, however, they remain only a short time, but depart early in the spring to their northern wilds, to breed and spend the summer.

The history of the Bernacle has been rendered remarkable by the marvellous accounts which were in former times related concerning their propagation, or rather their growth. Almost all the old naturalists, as well ornithologists as others, assert that they were produced from shells which grow out of rotten ship-wrecked timber, and other kinds of wood and trees which lay under water, in the sea, and that these shells owed their origin to "spume or froth," which, in a short time, assumed a fungous appearance upon the wood: others affirmed that they were produced from the palms or fruits of a tree like the willow, which, when ripe, dropped off into the water, and became alive, &c. Treatises were written expressly on these chimerical principles, giving a particular description of their first appearance, progressive growth, birth, (or final exclusion from the shell,) and of their dropping into the sea, swimming about, and becoming perfectly feathered birds, &c. Other authors, indeed, less credulous, suspected the truth of these assertions: Belon was of the number of those who laughed at the story in his

day; and Willoughby, long after him, treated such incoherent narratives with contempt. It must excite regret, that so respectable, so learned, and so grave an author as Gerard, should not only have believed this wonderful transformation, but that he should have introduced the idle tale into his invaluable Herbal.* But even to enumerate these authors, or to quote the entertaining parts of the wild whimsies with which they have embellished their descriptions of these birds, would far exceed the limits of this work, and would only serve to prove (were that necessary) how credulous, not only the great unthinking mass, but even the philosophers, once were, and how far it was possible for such circumstantially-told miracles to lay the understandings of mankind fast asleep. Bartholin discovered that these Goose-bearing conches contained only a shell-fish of a particular kind, a species of multivalve—the *Pousse-pieds* of Wormius and Lobel, and the *Lepas Anatifera* of Linnæus.

* See Gerard's Herbal, published in 1597, article—"The *Goose-Tree.*"



THE EIDER DUCK.

ST. CUTHBERT'S DUCK.

(*Anas mollissima*, Linn.—*L'Eider*, Buff.)

This wild, but valuable, species is of a size between the Goose and the Domestic Duck, and appears to be one of the graduated links of the chain which connects the two kinds. The full-grown old males generally measure about two feet two inches in length, and two feet eighteen in breadth, and weigh from six to above seven pounds. The head is large; the middle of the neck small, with the lower part of it spread out very broad, so as to form a hollow between the shoulders, which, while the bird is sitting at ease, seem as if fitted to receive its reclining head. The bill is of a dirty yellowish horn colour, darkish in the middle, and measures, from the tip to the corners of the mouth, two inches and a half: the upper mandible is forked in a

singular manner towards each eye, and is covered with white feathers on the sides, as far forward as the nostrils. The upper part of the head is of a soft velvet black, divided behind by a dull white stroke pointing downwards: the feathers, from the nape of the neck to the throat, are long, or puffed out, overhanging the upper part of the neck, and look as if they had been clipped off at the lower ends: they have the appearance of a pale pea-green velvet shag, with a white line dropping downward from the auriculars on each side. The cheeks, chin, upper part of the neck, the back, and lesser wing coverts, are white: the scapulars, and secondary quills, next the body, dirty white: bastard wings, and primary quills brown; secondaries and greater coverts the same, but much darker: the lower broad part of the neck, on the front, to the breast, is of a buff colour; but in some specimens tinged with rusty red: the breast, belly, vent, rump, and tail coverts are of a deep sooty black: tail feathers hoary brown: legs short, and yellow: webs and nails dusky. The female is nearly of the same shape, though less than the male, weighing only between five and six pounds; but her plumage is quite different, the ground colour being of a reddish brown, prettily crossed with waved black lines; and in some specimens the neck, breast, and belly, are tinged with ash: the wings are crossed with two bars of white; quills dark: the neck is marked with longitudinal dusky streaks, and the belly is deep brown, spotted obscurely with black.

The Eider Duck lays from three to five large, smooth, pale olive-coloured eggs: these she deposits and conceals in a nest, or bed, made of a great quantity of the soft, warm, elastic down, plucked from her

own breast, and sometimes from that of her mate. The ground work or foundation of the nest is formed of bent grass, sea-weeds, or such like coarse materials, and it is placed in as sheltered a spot as the bleak and solitary place can afford.

In Greenland, Iceland, Spitzbergen, Lapland, and some parts of the coasts of Norway, the Eiders flock together, in particular breeding places, in such numbers, and their nests are so close together, that a person in walking along can hardly avoid treading upon them. The natives of these cold climates eagerly watch the time when the first hatchings of the eggs are laid: of these they rob the nest, and also of the more important article, the down with which it is lined, which they carefully gather and carry off. These birds will afterwards strip themselves of their remaining down, and lay a second hatching, of which also they are sometimes robbed: but it is said, that when this cruel treatment is too often repeated, they leave the place and return to it no more.* The quantity of this

* The following particulars, from Von Troil's Letters on Iceland, are given on account of the singular trait of character which is mentioned—that of two females occupying only one nest:—

"The Eider birds build their nest on little islands not far from the shore, and sometimes even near the dwellings of the natives, who treat them with such kindness and circumspection as to make them quite tame. In the beginning of June they lay five or six eggs, and it is not unusual to find from ten to sixteen eggs in one nest, with two females, who agree remarkably well together. The whole time of laying continues six or seven weeks, during which time the natives visit the nest for the purpose of taking the down and eggs, at least once a week. They first carefully remove the female, and then take away the down and part of the eggs; after which she lays afresh, covering her eggs with new down plucked from her breast: this being

valuable commodity, which is thus annually collected in various parts is uncertain. Buffon mentions one particular year, in which the Icelandic company sold as much as amounted to upwards of eight hundred and fifty pounds sterling. This, however, must be only a small portion of the produce, which is all sold by the hardy natives, to stuff the couches of the pampered citizens of more polished nations.

The great body of these birds constantly reside in the remote northern, frozen climates, the rigours of which their thick cloathing well enables them to bear. They are said to keep together in flocks in the open parts of the sea, diving very deep in quest of shell-fish and other food, with which the bottom is covered; and when they have satisfied themselves, they retire to the shore, whither they at all times repair for shelter, on the approach of a storm. Other less numerous flocks of the Eiders branch out, colonize, and breed further southward in both Europe and America: they are found on the promontories and numerous isles of the

taken away, the male comes to her assistance, and covers the eggs with his down, which is left till the young are hatched. One female, during the whole time of laying, generally gives half a pound of down. The down from dead birds is accounted of little worth, having lost its elasticity. There are generally exported fifteen hundred or two thousand pounds of down on the company's account, exclusive of what is privately sold. The young ones quit the nest soon after they are hatched, and follow the female, who leads them to the water, where, having taken them on her back, she swims with them a few yards, and then dives, and leaves them floating on the water: in this situation they soon learn to take care of themselves, and are seldom afterwards seen on the land, but live among the rocks, and feed on insects and sea-weed."

coast of Norway, and on those of the Northern and Western islands of Scotland, and also on the Farn Isles, on the Northumberland coast, which latter is the only place where they are known to breed in England, and may be said to be their utmost southern limit in this quarter, although a few solitary instances of single birds being shot further southward along the coast have sometimes happened. Mr. Tunstall had a stuffed specimen in his museum, which was shot in January, at Hartlepool, on the Durham coast. The foregoing figure and description were taken from a perfect bird, in full plumage, shot in April, near Holy Island.

It is not known that any attempts to domesticate this species have succeeded. Such as were made by the late Rev. Dr. Thorp, of Ryton, entirely failed of success.

THE KING DUCK.

(*Anas spectabilis*, Linn.—*Le Canard à tête grise*, Buff.)

The stuffed specimen from which the above figure was made, was obligingly lent to this work by Matthew Bell, Esq., of Woolsington, to whom it was presented by William Nelson Griffiths, Esq., of his Majesty's ship Griper. It was shot at Melville Island, during Captain Parry's first expedition for the discovery of a north-west passage to the Pacific Ocean. This is somewhat less than the Eider Duck. Length two feet; the bill, from the tip to the protuberance on the upper mandible, one inch and an eighth; that, as well as the rest of the bill, is of an orange colour. The protuberance is compressed on the sides, and elevated nearly to the height of the crown of the head, and is

divided in the middle by a black velvet-looking line, which reaches the brow, and passes downward on each side, from the corner of the eyes to the edge of the bill near the gape of the mouth, where the feathers are of a tawny yellow, and the same above the eyes, the under orbits of which are black; a white line falls down from the corners of the eye to the neck; from this a black stripe passes to the joint of the under mandible, ending in a point at the chin; the head and neck are elegant pale ash: the cheeks and auriculars are of a pea-green colour, and have the appearance of velvet shag; this colour fades into a dull white on the sides towards the chin and neck: the lower part of the neck and breast are tinged with buff: the upper part of the back and the coverts, are white; a patch of the same falls over the sides of the upper tail coverts: the secondaries curve downwards over the primary quills, like those of the Eider Duck, and these, as well as the rest of the plumage, are black. The female is without the protuberance on the bill: her head greatly resembles that of the male Eider: the whole plumage is in deeper and lighter shades of brown; the head and upper part of the neck are striped downwards with narrow lines of deepish brown: the breast feathers are brown, margined with darker-coloured edges; those of the scapulars and sides are much darker than those in the middle, and are edged with pale or whitish brown.

These birds are common in Baffin's Bay, Hudson's Bay, and Greenland,* where they remain until driven

* Their flesh is accounted excellent; the natives of those cold regions make garments of their skins. They kill them with darts, and use the following method:—A number of men, in canoes, upon falling

from their northern haunts by the frost, when they migrate to more southern climes, and are then met with in Zetland and the Orkney isles. They are said to build on the sides of ponds and rivers; the nest is made of sticks and moss, and lined with their own down and breast feathers, like the Eider Duck's, and their down is said to be equally valuable: they lay four large whitish eggs.

in with a flock, suddenly set up a loud shouting noise, on which the birds being too much frightened to fly away, dive under water; but as the place at which they are to rise again is known by the bubbling of the water, the fowlers follow them as closely up as may be, and acting thus three or four times over, the birds become so fatigued as to be easily killed.

THE FERRUGINOUS DUCK.

RUDDY GOOSE, LATH.

(*Anas rutila*, Faun. Suec.)

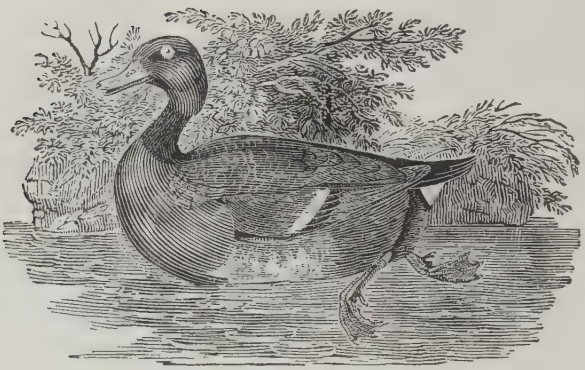
The above figure of this rare bird was taken from a stuffed specimen once in the extensive museum of Wycliffe, whose benevolent owner, Marmaduke Tunstall, Esq., missed nothing which could throw a light upon the wonders of creation, and whose knowledge of natural history ranked him amongst the first of its votaries. It is now in the Newcastle Museum.

The bill* measures from the tip to the brow about

* We forbear describing its colour, as that, with the irides, legs, and feet are seldom faithfully attended to by bird preservers; and until an improvement takes place in this respect, as well as in giving the contour of the figure, and placing the different series of the feathers in their proper places, it will continue a great difficulty with the artist to make a good figure, and with the ornithologist a correct descripton.

one inch and five eighths; it is deepish at the base, and flat at the tip. This and the head are small in proportion to the rest of the body. The brow and cheeks are white, which is extended over the eyes, and pointed towards the nape: the crown of the head, auriculars, and upper part of the neck, are dark dusty brown: the upper and under plumage are of a lightish chesnut, inclining to red, on which the feathers are slightly margined; the coverts are white; the speculum (or beauty spot) is glossy bronzed green; the primaries, lower part of the back, tail coverts, and tail, are black: the legs are longer than is usual in the Duck tribe, and the feet are large.

This figure (supposed to be a female) does not agree with the one described by Montagu, and the bird is assuredly not well known to ornithologists. Latham says, "one of this species was killed in Lincolnshire," (probably this identical bird) "found in the Swedish rivers, but rarely." "Mr Pennant has received it from Denmark."



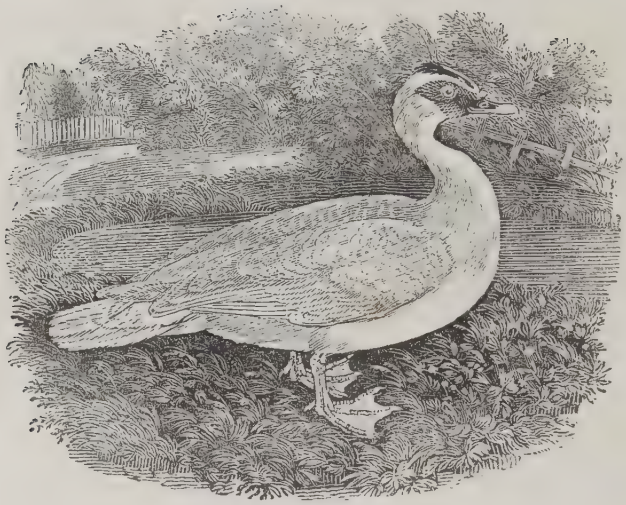
THE CASTANEOUS DUCK.

(*Anas nyroca*, Gm. Linn.)

A coloured drawing, from which the above figure was engraven, was presented to this work by the late Rev. William Cornforth, of Long Stanton Rectory, near Cambridge. He esteemed it a very rare bird, not having seen it before, nor its description in any work on ornithology. It was shot on a pond near the little village of Hare-street, Essex. Montagu, after many doubts, and much investigation, says, it has only lately been considered a new British species, having before been confounded with the Ferruginous Duck of Pennant; and he acknowledges his obligations to Mr. Foljambe, for enabling him, from three specimens in his museum, to consider this as being distinct from the Ferruginous Duck, and has affixed the name as above, and given a description of it, which nearly corresponds

with the above figure.* He says, in describing the male, that it weighs thirty-three ounces, and measures in length sixteen inches and a half; the females measured and weighed more. The bill from the tip to the brow is one inch and three-quarters long, deep at the base, flattish at the point, and of a dark lead colour, with the nail black; the irides yellow; the head, upper part of the neck, and breast, are of a brilliant dark reddish chesnut; the sides, and the feathers which cover the thighs, are also of that colour, but of a duller cast, and the belly the same, but much mottled and broken with white; the tail, rump, and upper tail coverts black; the under pure white, which forms a strong contrast with the black, which drops down before the vent feathers towards the thighs; the upper plumage is dusky brown; a collar of the same colour surrounds the middle of the neck, and passing behind, becomes uniform with the colour of the shoulders and the back; the secondary quills are black at the tips, and white at the base, and form the speculum or oblique bar across the closed wing; the quills are short, reaching only to the rump, near the root of the tail; the legs are dusky.

* On comparing Mr. Cornforth's drawing with a stuffed specimen from the Ravensworth museum, it was found to be tolerably accurate.



THE MUSK DUCK.

CAIRO, GUINEA, OR INDIAN DUCK.

(*Anas moschata*, Linn.—*Le Canard Musque*, Buff.)

This species is much larger than the Common Duck, measuring about two feet in length. The irides are pale yellow; the bill from the tip to the protuberance on the brow, is more than two inches long. Domestication, from time to time, has made a great variation in the plumage of these birds, but they are all alike in having a fleshy knob on the base of the bill, and a naked, red, warty or carunculated skin extending from that and the chin to above the eyes, and in having the crown of the head rather tufted and black, which they can erect at pleasure. The legs are

short and thick, and, as well as the toes, vary in different birds from red to yellow.

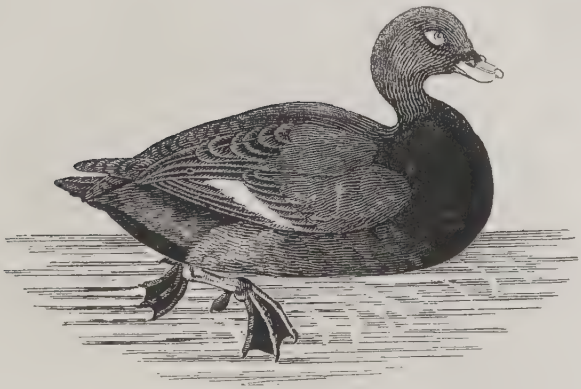
Ornithologists are in doubt as to the country to which these birds originally belonged; it is, however, agreed, that they are natives of the warm climates. Pennant says they are met with, wild, about the lake Baikal, in Asia; Ray, that they are natives of Louisiana; Marcgrave, that they are met with in Brazil; and Buffon, that they are found in the overflowed savannas of Guiana, where they feed in the day-time upon the wild rice, and return in the evening to the sea; he adds, "they nestle on the trunks of rotten trees; and after the young are hatched, the mother takes them one after another by the bill and throws them into the water." It is said that great numbers of the young brood are destroyed by the alligators, which are common in those parts.

These birds have obtained the name of Musk Duck, from their musky smell, which arises from the liquor secreted in the glands on the rump. They breed readily with the Common Duck, forming an intermediate kind, better suited to the table than either of the parents. The Hybrids do not appear to be productive.

In former editions of this work, the description of the plumage of these birds was taken from other ornithologists, whose accuracy cannot be doubted. The bill red, except about the nostrils and tip, where it is brown; the cheeks, throat, and fore part of the neck, white, irregularly marked with black: the belly, from the breast to the thighs, white. The general colour of the rest of the plumage is deep brown,

darkest, and glossed with green, on the back, rump, quills, and tail; the two outside feathers of the latter, and the first three of the quills, are white.

The above is the general appearance of the Musk Duck; but the living specimen from which our figure was drawn, was, excepting the head, entirely white. The bird was lent to this work by William Losh, Esq., of Point Pleasant, near Newcastle, who has had a breed of them for several years. The original pair came from France: they were white, and their progeny continue the same. They are completely domesticated, are disposed to perch on trees and out-houses, but the smallest disturbance will cause them to abandon their nest. They are easily reared, producing at a hatching eight, ten, or twelve, according to the care bestowed upon them.



THE VELVET DUCK.

DOUBLE SCOTER, OR GREAT BLACK DUCK.

(*Anas fusca*, Linn.—*La Grande Macreuse*, Buff.)

Weighs about three pounds two ounces, and measures above twenty inches in length. The upper mandible is broad, and flat, and rises into a kind of black knob at the base: the nostrils are of the same colour, and stand out on each side; the middle, or ridge, and the nail, are red: the rest of it is orange yellow, edged with black. The under mandible is pale or yellowish white, edged and spotted with black, and tipped with deep yellow: both are coarsely serrated. The head is large, the eyes small, with a spot of white below each; and the irides are nearly of the same colour. All the rest of the plumage, excepting a white stroke or band which crosses the closed wings in an oblique direction, is of a soft smooth sooty black, glossed with a cast of purple on the head, upper part

of the neck, and shoulders, and inclining to brown on the sides, belly, and vent: the outer sides of the legs and toes are of a fine crimson colour; the inner sides deep yellow; the webs and nails black; and the joints of both legs and toes look as if they were stained or bespattered with ink: the tail, consisting of fourteen feathers, is short and pointed. The female is without the protuberance on the base of the bill, and has a whitish spot before the eyes, and another still whiter on the tips of the auriculars; the under parts are spotted from the breast nearly to the vent, with white and brown: a white stripe is formed on the wing, like that of the male, and her plumage is dull brown.

These birds are natives of the northern parts of the world, where they rear their young, and continue during the summer months, but retire southward in winter, at which season they are met with in greater or less numbers, and according to the severity of the weather, approach towards the temperate climates of Europe, Asia, and America. In the latter quarter they are frequently seen as far south as New York, and spread themselves in small numbers along the shores of western Europe, as far as France, where they sometimes appear in company with the large flocks of Scoters, and are often caught in the fishermen's nets with those birds; but they are seldom met with on the British shores.

THE SCOTER,

BLACK DUCK,

(Anas nigra, Linn.—*La Macreuse,* Buff.)

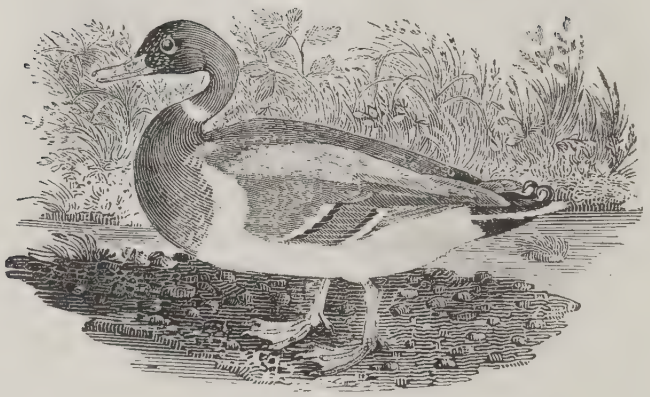
Weighs generally about two pounds nine ounces, and measures sixteen or eighteen inches in length, and thirty-four in breadth. The base of the upper mandible is raised up into a kind of large knob, divided downwards in the middle by a narrow bright or deep yellow stripe, which is spread round the projecting edges of the nostrils, and extended nearly to the tip: the rest of the bill is black, grooved along near the edges, where it is broad and flat: the under mandible is also black: irides dusky. From the curious conformation and appearance of the bill, (of which a more accurate figure is subjoined) this species cannot easily be mistaken, although it is said that the knob in some specimens is red: in that

of the females it is hardly noticeable; and in the younger males it is of a small size. The eyelids are yellow, the irides dark, and the whole of its close smooth plumage is black, glossed on the head and neck with purple. The tail consists of sixteen sharp-pointed feathers, of which the middle are the longest: legs brown. In some of the young females the plumage is grey.

In severe winters the Scoters leave the northern extremities of the world in immense flocks, dispersing themselves southward along the shores of more temperate climates. They are only sparingly scattered on the coasts of England; but, according to Buffon, they appear in great numbers upon the northern coasts of France, to which they are attracted by beds of a certain kind of small bivalve shell-fish *(vaimeaux)*, which abound in those parts, and of which they are very fond, for they are almost incessantly diving in quest of them. Over these beds of shell-fish, the fishermen, at low water, spread their long nets, floated or supported horizontally two or three feet from the sand: these they leave to be covered by the overflowing tide, which also brings the Scoters prowling along with it, within their accustomed distance from the beach. As soon as the first of them perceives the shells, it instantly dives, when all the rest follow the example, and numbers are entangled in the floating meshes of the net. In this way it is said that sometimes twenty or thirty dozen have been taken in a single tide. These birds are sold to the Roman Catholics, who eat them on fast days and in Lent, when their religious ordinances have forbidden the use of all animal food except fish; but these birds, and a few others of the same fishy flavour, have been exempted

from the interdict, on the supposition of their being cold-blooded, and partaking of the nature of fish.

The Scoters seldom quit the sea, upon which they are very nimble, and are indefatigable expert divers; but they fly heavily, near the surface of the water, and to no great distance, and are said to walk awkwardly erect on the land.



THE MALLARD,

COMMON WILD DUCK,

(*Anas Boschas*, Linn.—*Le Canard Sauvage*, Buff.)

Weighs from thirty-six to forty ounces, and measures twenty-three inches in length, and thirty-five in breadth. The bill is of a yellowish green colour, not very flat, about an inch broad, and two and a half long, from the corners of the mouth to the tip of the nail: the head and upper half of the neck are of a glossy deep changeable green, terminated in the middle of the neck by a white collar, with which it is nearly encircled: the lower part of the neck, the breast, and shoulders, are of a deep vinous chesnut: the covering scapular feathers are of a kind of silvery white; those underneath rufous; and both are prettily crossed with small waved threads of brown: wing coverts ash: quills brown; and between these intervenes the beauty-

spot (common in the Duck tribe) which crosses the closed wing in a transverse oblique direction: it is of a rich glossy purple, with violet or green reflections, and bordered by a double streak of black and white. The belly is of a pale grey, delicately pencilled and crossed with numberless narrow waved dusky lines, which, on the sides and long feathers that reach over the thighs, are more strongly and distinctly marked: the upper and under tail-coverts, lower part of the back, and the rump, are black: the latter glossed with green: the four middle tail feathers are also black, with purple reflections, and, like those of the Domestic Drake, are stiffly curled upwards; the rest are sharp-pointed, and fade off to the exterior sides, from a brown to a dull white: legs, toes, and webs red.

The plumage of the female is very different from that of the male, and partakes of none of his beauties except the spot on the wings. All the other parts are plain brown, marked with black. She makes her nest, lays from ten to sixteen greenish white eggs, and rears her young, generally in the most sequestered mosses or bogs, far from the haunts of man, and hidden from his sight among reeds and rushes. To her young helpless unfledged family (and they are nearly three months before they can fly) she is a fond, attentive, and watchful parent, carrying or leading them from one pool to another, as her fears or inclinations direct her; and she is known in this country to use the same wily stratagems to mislead the sportsman and his dog, as those before noticed respecting the Partridge.

Like the rest of the Duck tribes, the Mallards, in prodigious numbers, quit the north at the end of autumn, and migrating southward, arrive at the beginning

of winter in large flocks, and spread themselves over all the loughs and marshy wastes in the British Isles. They pair in the spring, when the greater part of them again retire northward to breed; but many straggling pairs stay with us: they, as well as preceding colonists of their tribes, remain to rear their young, who become natives, and continue with us throughout the year.

Many and various are the contrivances which have been used, in both ancient and modern times, to catch these wild, shy, and wary birds; and from the avidity with which the sport is still followed, it is hardly necessary to observe how highly they are esteemed, and what place they hold as a delicacy on the table. To describe these various contrivances would swell out this part of their history beyond its proper limits; and Willoughby, Buffon, Pennant, Latham, and others, have left little new to add on this head. It will not be proper, however, to omit noticing the decoy, which from its superiority over every other method, promises to continue long in use; for in that mode the Mallard and other Ducks are taken by thousands at a time; whereas all the other schemes of lying in ambush, shooting, baited hooks, wading in the water with the head covered in a perforated wooden vessel, or in a calabash, &c.,* are

* This method of taking Wild Geese or Ducks is represented, as well as those anciently in use, of taking almost every kind of wild animals, in an old folio book, consisting of one hundred and five engravings, by Collaert and others, from the paintings of Johannes Stradanus. The wooden vessel which conceals the head of the fowler is there represented, as it were, floating about among the unsuspecting flocks, while with his hand the dexterous sportsman is pulling all those within his reach, one after another, by the legs under water. This method is still practised in China.

attended with much watching, toil, and fatigue, and are also comparatively trifling in point of success.

The decoys* now in use are formed by cutting *pipes* or tapering ditches, widened and deepened as they approach the water in various semicircular directions

* For the following account of the manner of taking Wild-fowl in decoys, this work is indebted to Mr. Bonfellow, of Stockton, in Norfolk :—

" In the lakes where they resort, the most favourite haunts of the fowl are observed : then in the most sequestered part of this haunt, they cut a ditch about four yards across at the entrance, and about fifty or sixty yards in length, decreasing gradually in width from the entrance to the farther end, which is not more than two feet wide. It is of a circular form, but not bending much for the first ten yards. The banks of the lake for about ten yards on each side of this ditch, (or pipe as it is called) are kept clear from reeds, coarse herbage, &c., in order that the fowl may get on them to sit and dress themselves. Across this ditch, poles on each side, close to the edge of the ditch, are driven into the ground, and the tops bent to each other and tied fast. These poles at the entrance form an arch, from the top of which to the water is about ten feet. This arch is made to decrease in height, as the ditch decreases in width, till the further end is not more than eighteen inches in height. The poles are placed about six feet from each other, and connected together by poles laid lengthways across the arch and tied together. Over them a net with meshes sufficiently small to prevent the fowl getting through, is thrown across, and made fast to a reed fence at the entrance, and nine or ten yards up the ditch, and afterwards strongly pegged to the ground. At the further end of the pipe, a tunnel net (as it is called) is fixed, about four yards in length, of a round form, and kept open by a number of hoops about eighteen inches in diameter, placed at a small distance from each other to keep it distended. Supposing the circular bend of the pipe be to the right when you stand with your back to the lake, on the left hand side a number of reed fences are constructed, called *shootings*, for the purpose of screening from sight the *decoy-man*, and in such a manner, that the fowl in the decoy may not be alarmed, while he is driving those in the pipe : these shootings are

through the swampy ground, into particular large pools, which are sheltered by surrounding trees or

about four yards in length, and about six feet high, and are ten in number. They are placed in the following manner :—

From the end of the last shooting, a person cannot see the lake, owing to the bend of the pipe; there is then no further occasion for shelter. Were it not for these shootings, the fowl that remain about the mouth of the pipe would be alarmed, (if the person driving the fowl already under the net should be exposed) and would become so shy as to forsake the place entirely. The first thing the decoy-man does when he approaches the pipe, is to take a piece of lighted turf or peat, and hold near his mouth, to prevent the fowl smelling him. He is attended by a dog taught for the purpose of assisting him : he walks very silently about half way up the shootings, where a small piece of wood is thrust through the reed fence, which makes an aperture just sufficient to see if any fowl are in : if not, he walks forward to see if any are about the mouth of the pipe. If there are, he stops and makes a motion to his dog, and gives him a piece of cheese or something to eat ; upon receiving it he goes directly to a hole through the reed fence, (No. 1.) and the fowl immediately fly off the bank into the water ; the dog returns along the bank between the reed fences and the pipe, and comes out to his master at the hole (No. 2.) The man now gives him another reward, and he repeats his round again, till the fowl are attracted by the motions of the dog, and follow him into the mouth of the pipe. This operation is called working them. The man now retreats farther back, working the dog at different holes, till the fowl are sufficiently under the net : he now commands his dog to lie down still behind the fence, and goes forward to the end of the pipe next the lake, where he takes off his hat and gives it a wave between the shootings ; all the fowl under the net can see him, but none that are in the lake can. The fowl that are in sight fly forward ; and the man runs forward to the next shooting and waves his hat, and so on, driving them along till they come to the tunnel net, where they creep in : when they are all in, he gives the net a twist so as to prevent their getting back : he then takes the net off from the end of the pipe with what fowl he may have caught, and

bushes, and situated commonly in the midst of the solitary marsh. At the narrow points of these ditches,

takes them out one at a time and dislocates their necks, and hangs the net on again; and all is ready for working again.

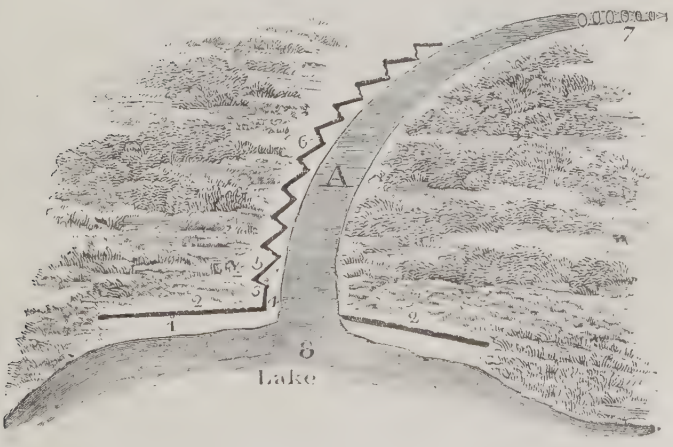
"In this manner five or six dozen have been taken at one drift. When the wind blows directly in or out of the pipe, the fowl seldom work well, especially when it blows in. If many pipes are made in a lake, they should be so constructed as to suit different winds.

"Duck and Mallard are taken from August to June. Teal or Wigeon, from October to March. Becks, Smee, Golden Eyes, Arps, Cricks, and Pintails or Sea Pheasants, in March and April.

"Pocker Ducks are seldom taken, on account of their diving and getting back in the pipe."

REFERENCES TO THE CUT.

No. 1. Dog's hole, where he goes to unbank the fowl.
2. Reed fences on each side of the mouth of the pipe.
3. Where the decoy-man shews himself to the fowl first, and afterwards at the end of every shooting.
4. Small reed fence to prevent the fowl seeing the dog when he goes to unbank them.
5. The shootings.
6. Dog's holes between the shootings, used when working.
7. Tunnel net at the end of the pipe.
8. Mouth of the pipe.



farthest from the pool, by which they are filled with water, the fowlers place their *funnel* nets: from these the ditch is covered by a continued arch of netting, supported by hoops, to the desired distance; and all along both sides skreens formed of reeds, are set up so as to prevent the possibility of the birds seeing the decoy-man; and as these birds feed during the night, all is ready prepared for this sport in the evening. The fowler, then, placed on the leeward side, sometimes with the help of his well-trained dog, but always by that of his better-trained tame Decoy-Ducks, begins the business of destruction. The latter, directed by his well-known whistle, or excited forward by the floating hempseed, which he strews occasionally upon the water, entice all the Wild Ducks after them under the netting; and as soon as this is observed, the man or his dog, as the fitness of opportunity may direct, is from the rear exposed to the view of the birds, by which they are so alarmed that they dare not offer to return, and are prevented by the nets from escaping upwards: they therefore press forward in the utmost confusion to the end of the *pipe*, into the *funnel* or *purse* nets there prepared to receive them, while their treacherous guides remain behind in conscious security. The season allowed by act of parliament for catching these birds in this way, continues only from the latter end of October till February.

Particular spots or decoys, in the fen countries, are let to the fowlers at a rent of from five to thirty pounds per annum; and Pennant instances a season in which thirty-one thousand two hundred Ducks, including Teals and Wigeons, were sold in London only, from

ten of these decoys near Wainfleet, in Lincolnshire. Formerly, according to Willoughby, the Ducks, while in moult and unable to fly, were driven by men in boats, furnished with long poles, with which they splashed the water between long nets, stretched vertically across the pools, in the shape of two sides of a triangle, into lesser nets, placed at the point; and in this way, he says, four thousand were taken at one driving, in Deeping-Fen; and Latham has quoted an instance of two thousand six hundred and forty-six being taken in two days, near Spalding, in Lincolnshire; but this mode of catching them while in moult is now prohibited.

THE TAME DUCK.

(*Anas domestica*, Linn.—*Le Canard domestique*, Buff.)

This valuable domestic owes its origin to the Mallard, the last-described species, but has long been reclaimed from a state of nature. Many of them appear in nearly the same plumage as the wild ones; others vary greatly from them, as well as from each other, and may be said to be marked with almost all colours; but all the males (Drakes) still retain the unvarying mark of their wild original, in the curled feathers of the tail. Long domestication has, however, deprived the Tame Duck of that keen, quick, and sprightly look and shape which distinguish the Mallard, and substituted a more dull and less elegant form and appearance in their stead. In the wild state they pair, and are monogamous, but become polygamous when tame.

The Count de Buffon, whose lively and ingenious

flights of imagination are peculiar to himself, says "Man made a double conquest when he subued inhabitants at once of the air and of the water. Free in both these vast elements, equally fitted to roam in the regions of the atmosphere, to glide through the ocean or plunge under its billows, the aquatic birds seemed destined by nature to live for ever remote from our society, and from the limits of our dominion." "Eggs taken from the reeds and rushes amidst the water, and set under an adopted mother, first produced, in our farm-yards, wild, shy, fugitive birds, perpetually roving and unsettled, and impatient to regain the abodes of liberty." These, however, after they had bred and reared their own young in the domestic asylum, became attached to the spot; and their descendants in process of time, grew more and more gentle and tractable, till at last they appear to have nearly relinquished and forgotten the prerogatives of the savage state, although they still retain a strong propensity to roam abroad, in search, no doubt, of the larger pools, marshy places, and bogs, which it is natural to suppose they must prefer to the beaten, hard, pebbly-covered surface, surrounding the scantily-watered hamlet: and indeed it is well known to every observing good housewife, that where they are long confined to such dry places, they degenerate in both strength and beauty, and lose much of the fine flavour of those which are reared in spots more congenial to their nature. That these, and such like watery places, which their health requires for them to wash, dive, feed, rest, and sport in, are not better tenanted by these useful and pretty birds, is much to be regretted, and marks strongly a falling off—a want

of industry* in those females to whose lot it falls, and whose duty it is to contribute their quota of attention to these lesser but not uninteresting branches of rural economy. Were this done, and ponds made in aid of the purpose, in every suitable contiguous situation, there can be no doubt but that a multiplied stock of Ducklings, to an inconceivable amount, might be annually reared, with a comparatively trifling additional expense; for the various undistinguishable animal and vegetable substances upon which they chiefly live, and for which they unceasingly search with their curiously constructed bills, sifting and separating every alimentary particle from the mud, unless fed upon by them, are totally lost. When older they also devour worms, spawn, water insects, and sometimes frogs and small fishes, together with the various seeds of bog and water plants, of which they find an abundant supply when left to provide for themselves in those wet places.

When they, with other kinds of fowl, are busily employed in picking up the waste about the barn door, they greatly enliven and beautify the rural scene.

> " A snug thack house, before the door a green;
> " Hens on the midding, ducks in dubs are seen:
> " On this side stands a barn, on that a byre;
> " A peat stack joins, and forms a rural square."†

To this may be added the no less pleasing peep at the mill and mill-dam, when well furnished with these their feathered inhabitants. The village school-boy witnesses

* The thrifty huswife is aye weel kend by her sonsy swarms o' bonny chucky burdies." — *Scotch Proverb.*

† Allan Ramsay.

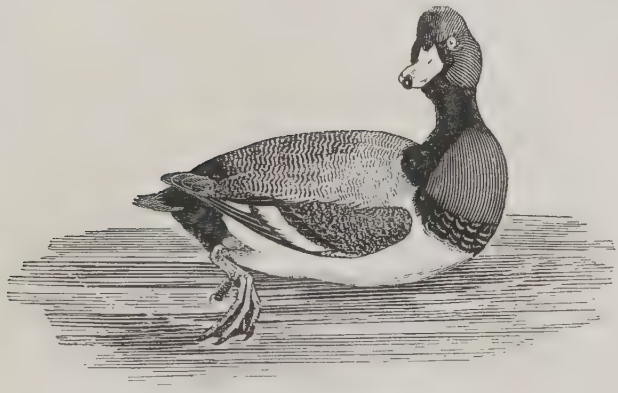
with delight the antic movements of the busy shapeless little brood, sometimes under the charge of a foster mother, who, with anxious fears, paddles by the brink, and utters her unavailing cries, while the Ducklings, regardless of her warnings, and rejoicing in the element so well adapted to their nature, are splashing over each other beneath the pendent foliage; or, in eager pursuit, snap at their insect prey on the surface, or plunge after them to the bottom: some, meanwhile, are seen perpendicularly suspended, with the tail only above water, engaged in the general search after food.

Scenes like these, harmonized by the clack of the mill and its murmuring water-fall, afford pleasures little known to those who have always been engaged in mere worldly pursuits: but such picturesque beauties pass not unnoticed by the young naturalist; their charms invite his first attentions, and probably bias his inclinations to pursue studies which enlarge and exalt his mind, and can only end with his life.

THE HOOK-BILLED DUCK.

(*Anas adunca*, Linn.—*Le Canard à bec courbé*, Brisson.)

The bill of this differs from that of the Mallard and of the Tame Duck, in being broader, longer, and in bending more downwards; but as this bird is of the same species, so in other respects it nearly resembles them, and this variation of the bill is probably only one of those accidental sportings of nature, not very uncommon in all domestic animals; every variety of which, each with its original peculiarities, (for like begets like,) may easily be kept up as long as caprice shall feel gratified by continuing them. Latham says, these birds seem only to be kept in England out of curiosity, but that according to the information he received, they are full as common in Germany as the other sort of Tame Ducks. He also mentions other varieties of the Mallard. Those with copped heads, others wanting the webs of their feet, &c., if added to the list, would only serve to mislead the young enquirer; and to the experienced ornithologist such details are unnecessary.



THE SCAUP DUCK.

(*Anas Marila*, Linn.)

Some of this species, it is said, weigh only a pound and a half, while others exceed that weight by eight or nine ounces, and measure, when stretched out, nearly twenty inches in length, and thirty-two in breadth. The bill is broad and flat, more than two inches long from the corners of the mouth to the tip, and of a fine pale blue or lead colour, with the nail black: irides bright deep yellow: the head and upper half of the neck are black, glossed with green: the lower part of the latter, and the breast, are of a sleek plain black: the throat, rump, upper and under coverts of the tail, and part of the thighs, are of the same colour, but dull, and more inclining to brown. The tail, when spread out, is fan-shaped, and consists of fourteen short brown feathers: the back, scapulars, wing coverts, and tertials, are varied from white to deeper

shades of pale ash, and ash brown, and are prettily marked with delicately freckled, or more distinctly penciled transverse dark waved lines: the bastard wings, greater coverts, and the exterior webs of the first two or three primary quills, (the interior webs of which are brownish ash,) and the tips of all the rest, are deep brown, more or less sprinkled with white, and crossed with narrow waved white lines: some of the primary quills towards the body, are white: the bases of the secondaries, of the same colour, form an oblique bar across the wings, which is stopped by a single under tertial feather, of plain brown, with green reflections: the belly is white, and shaded off towards the vent with the same kind of sprinkled and waved lines as those so predominant on a large portion of the plumage. The legs are short; toes long, and, as well as the outer or lateral webs of the inner toes, are of a dirty pale blue colour; all the joints and the rest of the webs are dusky. These birds are said to vary greatly in their plumage, as well as size, but those which have come under the author's observation were all nearly alike.

The Scaup Duck, like others of the same genus, quits the rigours of the dreary north in the winter months, and in that season only is met with, in small numbers, on various parts of the British shores.

The female differs so much from the male, as to have been considered a distinct species, and figured as such in the British Miscellany. (Montagu.)

THE SHIELDRAKE.

SHELDRAKE, SKELDRAKE, OR BURROUGH DUCK.

(Anas Tadorna, Linn.—*La Tadorne.)*

The male of this prettily-marked species measures about two feet in length, three and a half in breadth, and weighs commonly two pounds ten ounces. The bill is red, with the nail and nostrils black: the upper mandible is broad, flat, and grooved on the edges towards the point, where it has rather a cast upwards; it is also depressed in the middle, and raised into a knob or tubercle at the base. The head, and upper part of the neck, are of a glossy dark or bottle green: the lower part of the neck, to the breast, is encircled with white, and joined by a broad band of bright orange bay, which is spread over, and covers the breast and

shoulders. The back, wing coverts, rump, upper tail coverts, and sides of the belly to the vent, and tail, are white: a dusky stripe, tinged with rufous, runs along the middle from the breast, the whole length of the belly: part of the scapulars next the wing are black, and those next the body white: the bastard wing, and some of the first primary quills, are black; the exterior webs of the next adjoining ones are glossed with gold green, which forms the speculum or beauty spot of the wings: this spot is bounded, and partly covered by the orange webs of the three succeeding quill feathers, which separate it from the scapulars. The tail is white, but some of its feathers are tipped with black: the legs pale red. The female is less than the male, and her plumage is not so vivid and beautiful. She makes her nest, and rears her young, under ground, in the rabbit holes which are made in the sand hills near the sea-shore: it is chiefly formed of the fine down plucked from her own breast; she lays from twelve to sixteen roundish white eggs, and the incubation lasts about thirty days. During this time, the male, who is very attentive to his charge, keeps watch in the day-time on some adjoining hillock, where he can see all around him, and which he quits only when impelled by hunger, to procure subsistence. The female also leaves the nest, for the same purpose, in the mornings and evenings, at which times the male takes his turn and supplies her place. As soon as the young are hatched, or are able to waddle along, they are conducted, and sometimes carried in the bill, by the parents, to the full tide, upon which they launch without fear, and are not seen afterwards out of tide-mark until they

are well able to fly: lulled by the roarings of the flood, they find themselves at home amidst an ample store of their natural food, which consists of sand-hoppers, sea-worms, &c. or small shell fish, and the innumerable shoals of the little fry which have not yet ventured out into the great deep, but are left on the beach, or tossed to the surface of the water by the restless surge.

If this family, in their progress from the nest to the sea, happen to be interrupted by any person, the young ones, it is said, seek the first shelter, and squat close down, and the parent birds fly off: then commences that truly curious scene, dictated by an instinct analogous to reason, the same as has been already noticed in the Wild Duck and the Partridge; the tender mother drops, at no great distance from her helpless brood, trails herself along the ground, flaps it with her wings, and appears to struggle as if she were wounded, in order to attract attention, and tempt a pursuit after her. Should these wily schemes, in which she is also aided by her mate, succeed, they both return when the danger is over, to their terrified motionless little offspring, to renew the tender offices of cherishing and protecting them.

These birds are sometimes watched to their holes, which are dug up to the nest, whence the eggs are taken, and hatched, and the young reared by a Tame Duck. In this way many gentlemen, tempted by the richness of their garb, have their ponds stocked with these beautiful birds; but as they are of a roving disposition, and are apt to stray, or to quit altogether such limited spots, it is generally found necessary to pinion or disable a wing to secure them. The Shieldrake has

been known to breed with the Common Duck; but it is not well ascertained whether the hybrids thus produced will breed again or not.

This species is dispersed, in greater or less numbers, over the warm, as well as the cold climates, in various parts of the world: they are met with as far north as Iceland in the spring, and in Sweden and the Orkney Islands in the winter. Captain Cook notices them, among other sea-fowl, on the coast of Van Diemen's Land, and they have been seen, in great numbers, at the Falkland Islands. Although they are not numerous on the British and the opposite shores, yet they are common enough in the British Isles, where they remain throughout the year, always in pairs, and occasionally straggle away from the sea coast to the lakes inland.

THE SHOVELER.

BLUE-WING SHOVELER, KERTLUTOCK, OR BROAD-BILL.

(*Anas clypeata*, Linn.—*Le Souchet*, Buff.)

The Shoveler is less than the Wild Duck, commonly weighing about twenty-two ounces, and measuring twenty-one inches in length. The bill is black, three inches long, very broad or spread out, and rounded like a spoon at the end, with the nail hooked inward and small: the insides of the mandibles are remarkably well furnished with thin pectinated rows, which fit into each other like a weaver's brake, and through which no dirt can pass, while the bird is separating or sifting the small worms and insects from amongst the mud, by the edges of the water, where it is continually searching for them: the irides are of a fine pure yellow; the head and upper half of the neck of a dark glossy

changeable green: the lower part of the neck, the breast, and scapulars, white; the back is brown: belly and sides chesnut bay, and the wing coverts of a fine pale sky-blue, terminated with white tips, which form an oblique stripe across the wings, and an upper border to the beauty spot, or spangle, which is of a glossy changeable bronze, or resplendent green, and also divides or crosses the wings in the same direction: the greater quills and the tail are dusky, but in the latter the outside feathers, and the edges of some of the adjoining ones, are white: a ring of white also encircles the rump and the vent, behind which the feathers under the tail are black: legs and feet red. The female is smaller than the male, from which she also differs greatly in the colours of her plumage, the coverts and spangle spot on her wings being less brilliant, and the other parts composed of white, grey, and rusty, crossed with curved dusky lines, giving her much the appearance of the Common Wild Duck. She makes her nest, lined with withered grasses, on the ground, in the midst of the largest tufts of rushes or coarse herbage, in the most inaccessible part of the slaky marsh: she lays ten or twelve pale rusty-coloured eggs; and as soon as the young are hatched, they are conducted to the water by the parent birds, who watch and guard them with the greatest care. They are at first very shapeless and ugly, for the bill is then almost as broad as the body, and seems too great a weight for the little bird to carry. Their plumage does not acquire its full colours until after the second moult.

It would appear, from the varied descriptions of ornithologists, that these birds differ much from each

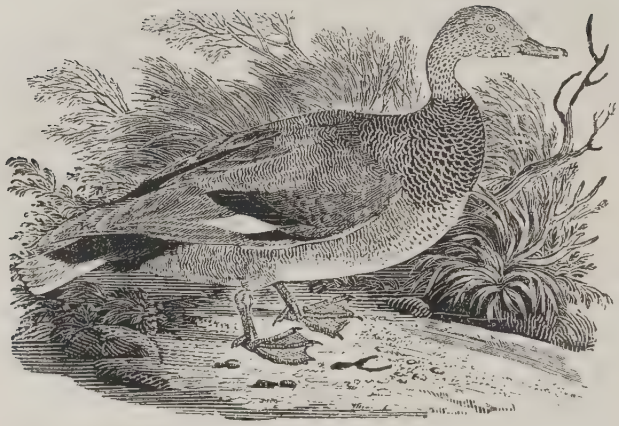
other, both in the colour of the bill, and in the disposition of the markings of their rich-coloured plumage. All, however, agree in ranking the Shoveler among the most beautiful of the Duck tribe; and it is also, in the opinion of many, inferior to none of them in the delicate flavour of its flesh, which is red, juicy, and tender.

It has not yet been ascertained whether the Shoveler breeds in England, where indeed it is a scarce bird; but, according to M. Baillon,* they are not uncommon in France, where they arrive about the month of February, disperse in the marshes, and a part of them hatch every year. He remarks that hardly any are ever seen during the winter. They are said to be met with in Scania and Gothland, and in most parts of Germany, Russia, and Kamtschatka; and also, in the winter months, in New York and Carolina, in America.

This species is of so wild, shy, and solitary a disposition, that all attempts hitherto made to domesticate them have failed. This work was favoured with the bird from which the foregoing figure and description were taken, by the author's friends at Cambridge.

The *Anas muscaria* of Linnæus (*Le Souchet à ventre blanc* of Brisson) differs only from this in having the belly white, and is considered merely as a variety of the same species. The Red-breasted Shoveler, (*Anas rubeus*, Turt. Linn.) hitherto described as a distinct species, is, according to Montagu, the Blue-winged or Common Shoveler; the double moulting having led to the mistake. Temminck confirms this opinion.

* The friend and correspondent of Count de Buffon.



THE GADWALL.

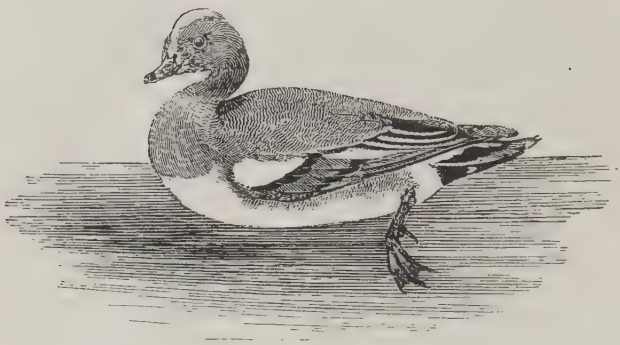
(*Anas strepera*, Linn.—*Le Chipeau*, Buff.)

The Gadwall measures about nineteen inches in length, and twenty-three in breadth. The bill is flat, black, and two inches long, from the tip to the corners of the mouth: the head, and upper part of the neck, are of a rufous brown colour, lightest on the throat and cheeks, and finely speckled and dotted all over with black and brown: the feathers on the lower part of the neck, breast, and shoulders, look like scales, beautifully margined and crossed with curved black and white lines: those of the back, scapulars, and sides, are light brown, marked transversely with narrower waved dusky streaks: the belly and thighs are dingy white, more or less sprinkled with grey: the lower part of the back dark brown: rump and vent black; and the tail ash, edged with white. The ridge

and lesser coverts of the wings are of a pale rufous brown, crossed obliquely by the beauty spot, which is a tri-coloured bar of purplish red, white, and black: the greater quills are dusky: legs orange red. The wings of the female are barred like those of the male, but the colours are of a much duller cast, and her breast, instead of his beautiful markings, is only plain brown, spotted with black.

Birds of this species breed in the desert marshes of the north, and remain there throughout the spring and summer. On the approach of winter they leave the European and Siberian parts of Russia, Sweden, &c., and commonly make their appearance about the month of November, on the French, British, and other more southern shores, where they remain till the end of February, and then return to their northern haunts. They are very shy and wary birds, feeding only in the night, when they make a hoarse jarring noise, and lurking concealed among the rushes in the watery waste during the day, in which they are seldom seen on the wing.

These birds shew themselves expert in diving as well as in swimming, and often disappoint the sportsman in his aim: for the instant they see the flash of the pan, they disappear, and dive to a distant secure retreat. The foregoing figure was made from a Wycliffe specimen.



THE WIGEON.

WHEWER, WHIM, OR PANDLED WHEW.

(*Anas Penelope*, Linn.—*Le Canard siffleur*, Buff.)

This bird weighs generally about twenty-three ounces, and measures nearly twenty inches in length, and two feet three in breadth. The bill is an inch and a half long, narrow, and serrated on the inner edges; the upper mandible is of a dark lead colour, tipped with black. The crown of the head, which is very high and narrow, is of a cream colour, with a small spot of the same under each eye: the rest of the head, the neck, and the breast, are bright rufous chesnut, obscurely freckled on the head with black spots, and darkest on the chin and throat, which are tinged with a vinous colour: a band, composed of beautifully waved, or indented narrow ash brown and white lines, separates the breast and neck; the back and scapulars are marked with similar feathers, as are also the sides

of the body under the wings, even as low as the thighs, but there they are paler: the belly, to the vent, is white: the ridge of the wing, and adjoining coverts, are dusky ash brown: the greater coverts brown, edged with white, (in some specimens wholly white,) and tipped with black, which forms an upper border to the changeable green beauty-spot of the wings, which is also bordered on the under side by another stripe formed by the deep velvet black tips of the secondary quills: the exterior webs of the adjoining quills are white, and those next the back, which are very long, are of a deep brown, (in some specimens deep black,) edged with yellowish white; the greater quills are brown; the vent and upper tail coverts black. The tail, which consists of fourteen feathers, is of a hoary brownish ash, edged with yellowish white; the two middle ones are sharp-pointed, darker and longer than the rest. The legs and toes are of a dirty lead colour, faintly tinged with green: the middle of the webs and nails black. "The female is brown, the middle of the feathers deepest: the fore part of the neck and breast paler: scapulars dark brown, with paler edges: wings and belly as in the male." The young of both sexes are grey, and continue in that plain garb till the month of February, after which a change takes place, and the plumage of the male begins to assume its rich colourings, in which, it is said, he continues till the end of July, and then again the feathers become dark and grey, so that he is hardly to be distinguished from the female.*

* M. Baillon, from whom these remarks are taken, adds, that the same changes happen to the Pintail, the Gadwall, and the Shoveler, and that they are also all grey when young.

These birds quit the morasses of the north on the approach of winter, and as they advance towards the end of their destined southern journey, they spread themselves along the shores, and over the marshes and lakes in various parts of the continent, as well as those of the British Isles; and it is said that some of the flocks advance as far south as Egypt. They remain in these parts during the winter, at the end of which the old birds pair, and the whole tribe, in full plumage, take their departure northward about the end of March. While they remain with us, they frequent the same places, and feed in the same mode as the Mallard, and are often taken in the decoys along with them and other kinds of Ducks.

The Wigeons commonly fly, in small flocks, during the night, and may be known from others by their whistling note while they are on the wing. They are easily domesticated in places where there is plenty of water, and are much admired for their beauty, sprightly look, and busy frolicksome manners.

THE POCHARD.

POKER, DUNBIRD, OR GREAT-HEADED WIGEON.

(*Anas ferina*, Linn.—*Le Canard Milouin*, Buff.)

The Pochard is nineteen inches in length, and two feet and a half in breadth, and weighs about one pound thirteen ounces. The bill is of a dark lead-coloured grey, with the tip and sides, near the nostrils, black: irides fine deep yellow. The head and neck are of a glossy chesnut, joined to a large space of sooty black which covers the breast, and is spread over the shoulders: the lower part of the back, the rump, tail coverts, and vent, are also black: the rest of the plumage, both above and below, is wholly covered with prettily freckled slender dusky threads, disposed transversely in close-set zig-zag lines, on a pale ground, more or less shaded off with ash and brown. The primary quills are brown, with dusky tips; the secondaries lead grey, tinged with brown, and slightly tipped with dull white. The tail consists of twelve short feathers, of a dark brownish

ash, which have also a hoary grey appearance: the legs and toes are lead colour, shaded and dashed with black.

This species is without the beauty-spot on the wings, and has altogether a more plain grave-looking plumage than others of this tribe. The specimen from which the above figure was drawn, was shot at Axwell Park, in the county of Durham: the description was taken from one shot in January, near Holy Island. The former differed from the latter in wanting the black on the rump and vent, and in some other slight variations in the shadings of its colours.

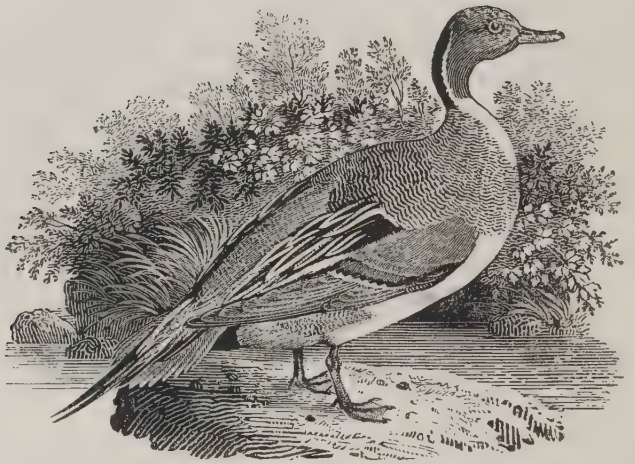
The head and neck of the female are chesnut: the breast is of rather a deeper colour: the coverts of the wings plain ash colour: the back marked like that of the male: the belly ash colour, clouded with chesnut.

These birds leave the north on the approach of winter, and migrate southward as far, it is said, as Egypt, in Africa, and Carolina and Louisiana, in America. They arrive in the marshes of France about the end of October, in tolerably numerous flocks; and considerable numbers of them are caught in the fens of Lincolnshire during the winter season, and sold in the London markets, where they and the female Wigeons are indiscriminately called Dunbirds, and are esteemed excellent eating. It has not yet been discovered whether any of them remain to breed in England.

The Pochard is of a plump round shape, and its walk is heavy, ungraceful, and waddling; but when on the wing, they fly with greater rapidity than the Mallard, and in flocks of from twenty to forty, commonly in a close compact body, whereby they may be easily distinguished from the triangular-shaped flocks of the

Wild Duck, as well as by the difference of the noise of their wings.

The few attempts which have been hitherto made to domesticate this species have failed of success. They do pretty well where they have plenty of water, but it is said that they cannot bear walking about on hard pebbly ground.



THE PINTAIL DUCK.

SEA PHEASANT, CRACKER, OR WINTER DUCK.

(*Anas acuta*, Linn.—*Le Canard à longue queue*, Buff.)

This handsome-looking bird is twenty-eight inches in length, and thirty-eight in breadth, and weighs about twenty-four ounces. The bill is rather long, black in the middle, and blue on the edges: the irides reddish: the head and throat are of a rusty brown, mottled with small dark spots, and tinged behind the ears with purple: the nape and upper part of the neck are dusky, margined by a narrow white line, which runs down on each side, and falling into a broader stripe of the same colour, extends itself on the fore part as far as the breast; the rest of the neck, the breast, and the upper part of the back, are elegantly

penciled with black and white waved lines: the lower back and sides of the body are undulated in the same manner, but with lines more freckled, less distinct, and paler: the scapulars are long and pointed, each feather black down the middle, with white edges: the coverts of the wings are ash brown, tipped with dull orange: below these the wing is obliquely crossed by the beauty-spot of glossy bronze purple green, with a lower border of black and white: this spangle is formed by the outer webs and tips of the middle quills: the rest of the quills are dusky. All the tail feathers are of a brown ash colour, with pale edges, except the two middle ones, which are black, slightly glossed with green, considerably longer than the others, and end in a point: the belly and the sides of the vent are white:* under tail coverts black: legs and feet small, and of a lead colour. The female is less than the male, and her plumage is of a much plainer cast, all the upper parts being brown, with each feather margined more or less with white, inclining to red or yellow: the greater coverts and secondary quills are tipped with cream colour and white, which form a bar across the wings. The fore part of the neck, the breast, and the belly, to the vent, are of a dull white, obscurely spotted with brown. The tail is long and pointed, but the two middle feathers do not extend themselves beyond the rest, like those of the male.

These birds do not visit the temperate and warm climates in great numbers, except in very severe winters, the great bulk of them dropping short, and remaining

* In some, the belly and fore part of the neck are of a reddish buff, or cream colour.

during that season in various parts of the Russian dominions, Sweden, Norway, &c., and also in the same latitudes in both Asia and America. They are seldom numerous in England, but flocks of them are sometimes abundantly spread along the isles and shores of Scotland and Ireland, and on the interior lakes of both countries, as well as those of the continent, as far south as Italy, and in America, as far south as New York. They are esteemed excellent eating.

The Pintail Duck is of a taller or more lengthened shape than any of the other species, and in the opinion of the Count de Buffon, seems to form the link between the Duck and the Gargany.

THE LONG-TAILED DUCK.

SWALLOW-TAILED SHELDRAKE.

(*Anas glacialis*, Linn.—*Le Canard de Miclon*, Buff.)

This species is considerably less than the last, and comes more nearly to the size of the Wigeon. The bill is short, black, and crossed by an orange-red bar between the tip and the nostrils, with both mandibles deeply pectinated on the edges. The front of the head, the cheeks, and the sides of the neck, are pale reddish brown, with an oval-shaped black and chesnut patch, placed on the sides behind the auriculars; the rest of the head and neck is white: the breast, shoulders, back, and lesser wing coverts, are of a deep chocolate colour, more or less inclining to black or brown in different birds: the greater coverts and primary quills dusky: the secondaries are reddish brown, and form an oblique bar of that colour across the wings: the

belly, vent, and scapulars are white; the feathers of the latter long, narrow, and sharp-pointed: the two middle or long feathers of the tail, and one on each side of them, are black: the rest white. The legs and toes are pale blue: webs and nails black: the inner toes and the small ones behind are margined by small lateral webs.

This species is described as varying in the different shades of their plumage. In some, the spots on the sides of the upper part of the neck are much larger and darker, and the two tail feathers are double the length of those of others: their legs are also said to be sometimes of deeper or lighter shades of red.

The Long-tailed Ducks, it is said, do not in the winter, like many of the other tribes, entirely quit their native haunts in the northern extremities of the world, but considerable numbers remain there, enduring its gloomy rigours, as well as enjoying the perpetual day, under the influence of the unsetting summer's sun, during the rest of the thus divided year. Numerous flocks, however, spread themselves southward in the winter, from Greenland and Hudson's Bay, as far as New York, in America; and from Iceland and Spitzbergen, over Lapland, the Russian dominions, Sweden, Norway, and the northern parts of the British Isles, in Europe. A similar progress is observed in Asia, where they are met with about Kamtschatka, &c. They frequent the lakes in the interior of all those parts, as well as the sea shores. The flocks which visit the Orkney and Zetland Isles appear in October, and continue there till April; and "about sun-set they are seen in vast companies going to and returning from the bays, in which they frequently pass the night, making such a noise, as

in frosty weather may be heard some miles." They are rather scarce in England, whither they come only in very hard winters, and even then but in small straggling parties. They fly swiftly, but seldom to a great distance, making a loud and singular cry. They are expert divers, and are supposed to live chiefly upon shell-fish.

The female, it is said, makes her nest among the grass near the water, lined, like that of the Eider Duck, with her own equally valuable down. Her eggs are of a bluish white colour, about the size of those of a Pullet. Latham says she lays five; others assert that the number is "seldom fewer than ten, and often as many as fourteen or fifteen." Some are of opinion that the latter number may be the produce of two females, as is said to be the case with the Eider Duck. When the young are hatched, the mother carries them to the water in her bill.

Latham describes the *Anas hyemalis* of Linnæas as the female of this species: he says the bill is the same: "sides of the head white; hind head cinereous; the rest of the head, the neck, breast, and back, dusky black: the lower part of the breast and scapulars chesnut: belly white: upper tail coverts and wings, much as in the *male:* legs dusky reddish brown." "Some birds of this sex have the brown feathers edged with ferruginous, others not." "I have likewise observed in some a white spot on each side of the lower part of the neck." He adds, that in the females which he had seen, the long tail feathers were wanting.

THE BIMACULATED DUCK.

(Anas Glocitans, Pallas.)

This species is about twenty inches in length, and in the contour of its figure, and in being slightly pin-tailed, bears some resemblance to the Long-tailed Duck; its plumage, though prettily variegated, does not look so shewy as that of some others of the tribe. The bill, from the tip to the brow, is about an inch and seven-eighths in length, of a deep lead colour, and the nail black; irides brown; the upper part of the head, to below the nape, is deep reddish brown, slightly crested and spotted, and joins a stripe of dark purple, which falls down behind to the middle, or small part of the neck, the fore part of which is glossy black tinged with green; the bill is bordered with black, and the space between that and the eye is occupied by a longish patch of a mixture of pale dull yellow, and spotted reddish brown, which extends over the under jaw, where it is nearly

joined to a similar lengthened patch below the auriculars, which falls down the sides of the neck; and this, together with the sides of the head, are of a glossy deep green; the lower part of the neck and breast is deep reddish chesnut, palest in the middle, and spotted with black; the upper plumage is darker than the under, and both are penciled with wavy brown lines, on a cinereous and light ash ground: the lesser wing coverts are dark cinereous, the greater the same, but crossed at the tips with a very narrow double bar or stripe of dull black and cinnamon brown; the speculum, or beauty spot, is glossy dark green, crossed with a black bar or stripe, and white tips; the secondaries, primaries, and tertials, are like the coverts, more or less of a deep dingy, or dusky cinereous brown; the scapulars are bordered by two stripes of pale cinnamon and glossy dark purple; the lower part of the back is dark brown; the upper and under tail coverts, and two middle tail feathers are black, glossed with green; those on each side are nearly the same colour as the quills; they are somewhat freckled and pointed, bordered and tipped with dingy white. The legs and feet are rather short, and are yellow; legs behind and the middle of the webs dusky.

The general colour of the plumage of the female is darkish brown, the feathers edged and tipped with pale cinnamon; the head and neck are of the latter colour, but lighter, and pretty closely furnished with dark narrow streaks. On the breast the feathers near their tips, are dark brown, and form roundish shaped spots: the coverts and speculum are similar to those of the male; the belly is white nearly to the thighs, whence to the

vent, and under tail coverts it is spotted with brown; the tail consists of sixteen pointed feathers, of a dark cinereous brown, tipped and edged with dull white; her legs and feet are like those of the male.

According to Pallas, this species is a native of Siberia, frequenting Lake Baikal and the River Lena. They have rarely been met with in the British isles;* a pair of them, which had been taken in a decoy near Maldon, in Essex, in the winter of 1812-13, were obligingly lent to this work by N. A. Vigors, Esq,, and transmitted to the author with sedulous care by G. T. Fox, Esq.

* Latham mentions two, which were taken in a decoy in England.

THE GOLDEN-EYE.

(*Anas Clangula*, Linn.—*Le Garrot*, Buff.)

The weight of this species varies from twenty-six ounces to two pounds. The length is nineteen inches, and the breadth thirty-one. The bill is bluish black, short, thick, and elevated at the base: the head large, slightly crested, and black, or rather of a glossy bottle green, with violet reflections; a large white spot is placed on the space on each side between the corners of the mouth and the eyes, the irides of which are of a golden yellow: the throat, and a small portion of the upper part of the neck, are of a sooty or velvet black; the lower, to the shoulders, the breast, belly, and vent, white; but some of the side feathers, and those which cover the thighs, are tipped with black: the scapulars white and deep black: of the latter colour are also the adjoining long tertial feathers, and those on the greater part of the back: the first fourteen primary quills,

with all the outside edge of the wing, including the ridge and a portion of the coverts, are brownish black: the middle part of the wing is white, crossed by a narrow black stripe, which is formed by the tips of the lesser coverts: tail dark hoary brown: legs short, of a reddish yellow colour, with the webs dusky: the inner and hinder toes are furnished with lateral webs: on the latter these webs are large and flapped. Willoughby says, "the windpipe hath a labyrinth at the divarication, and besides, above, swells out into a belly or puff-like cavity."

This is the description of an individual adult male, in which, as to the identity of the sex and species, no one can be mistaken; but as younger males have been met with, bearing in every respect the same plumage as the old ones, except in having no white spots before the eyes, and other (supposed) young males have also been seen both with and without those white spots, though with a female-looking garb, and their bills tipped with orange, like that of the Morillon; it is not only uncertain at what age the Golden-eye attains his full dress, but also, from the varied appearances, as well in these, as in those supposed to be females, it is doubtful whether two distinct species are not confounded in one, and the young of one species described as the older of another. Willoughby describes two species; the one, "the smaller reddish-headed Duck," which he at last supposes to be the female Golden-eye, —and the other the "greater reddish-headed Duck," "perchance the same as the last described, or the male thereof." Latham confesses himself equally at a loss with Willoughby; and as some of the correspondents

of the author are of one opinion, and some of another, in respect to the sex, as well as the species of these birds, he forbears giving their descriptions, from specimens, although perhaps accurately taken, because they would not remove the doubts already entertained, or elucidate the subject. It may, however, be quite proper to quote the substance of what Temminck says respecting these hitherto doubtful birds, (the Morillons and Golden-eyes,) and which sets aside the confused accounts of other ornithologists. He says, "It is quite certain that the Latin descriptions of the Morillon, Anas Glaucion of Linnæus, (Gmel. Syst.) and those of Latham, (index) designate in the clearest manner the old female and young male Golden-eye; at the same time it is evident that all the French, and some of the English indications, arranged as synonyms along with this merely nominal species (A. Glaucion,) ought to find a place among the names of the Anas fuligula or Tufted Duck, and that these descriptions are used erroneously, applying as they do, to this latter bird, the true Morillon." As there can be no reason to doubt the information given by this accurate author, who says it is founded on anatomical observation, it may be concluded that no such bird as the Morillon exists as a distinct species. It may not be amiss, however, to quote Mr. Pennant's account of the female Golden-eye in this place, and that of the supposed Morillon, sent to this work by George Strickland, Esq., of Ripon, in the subsequent account of the latter bird. "The head of the female is of a deep brown, tinged with red: the neck grey: breast and belly white: coverts and scapulars dusky and ash-coloured: middle

quill feathers white; the others, together with the tail, black: the legs dusky."*

These birds do not congregate in large flocks, nor are they numerous on the British shores, or on the lakes in the interior. They are late in taking their departure northward in the spring, the specimens before mentioned being shot in April. In their flight they make the air whistle with the vigorous quick strokes of their wings; they are excellent divers, and seldom set foot on the shore, upon which, it is said, they walk with great apparent difficulty, and, except in the breeding season, only repair to it for the purpose of taking their repose. These birds frequent the fresh water, as well as the sea, being found on the Shropshire meres during winter.†

The attempts which were made by M. Baillon to domesticate these birds, quite failed of success.

* A bird was sent to the author by the Rev. J. Davies, of Trinity College, Cambridge, agreeing with this description, except in the legs being yellow.

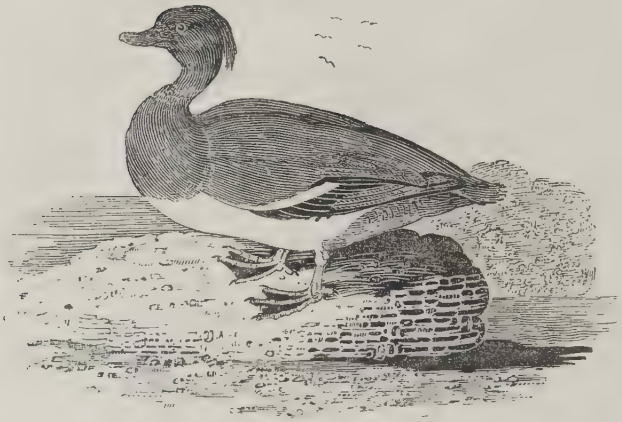
† Pennant.

THE MORILLON.

(*Anas Glaucion*, Linn.—*Le Morillon*, Buff.)

"Bill brown, orange from the nostrils to the point, the knob of which is black; it is an inch and a half long, rather narrow towards the apex; the nostrils are placed very forward: head brown, cheeks tinged with black: irides straw colour: a broad white circle round the neck, the back part of which is mottled with brown: breast, sides of the body, and scapular feathers, white, barred with black: belly white: thighs and vent feathers brown and white: inner coverts of the wings brown: back and coverts of the wings black, mottled with white: quill feathers and tertials black; secondaries white: tail rounded, and grey: legs and toes yellow brown, with a greenish tinge; webs and claws black. Length one foot four inches; breadth two feet four inches; weight one pound seven ounces."

Mr Strickland also gives a description of what he supposes to be the female; but the foregoing account of the Golden-Eye sets these conjectures aside.



THE TUFTED DUCK.*

(*Anas fuligula*, Linn.—*Le petit Morillon*, Brisson.)

This is a plump, round, and short-shaped species. The male is distinguished by a pendent crest, overhanging the nape of the neck, two inches in length. The weight is about two pounds, length eighteen inches. The bill is broad, of a dark lead colour; the nail black: irides deep orange: the head is black, glossed with purple; the neck, breast, and all the upper parts, are of a deep brown or black: the scapulars faintly powdered or sprinkled with light spots, so minute as not to be observed at a short distance. The wings are crossed by a narrow white bar: the belly, sides, and under

* The tuft is sometimes wanting, and in that state has been made a distinct species.—*Montagu.*

coverts of the wings, are of a pure white: the vent white, mixed with dusky. The tail consists of fourteen very short feathers: the legs are of a dark lead colour; webs black. The female is of a browner colour than the male, and has no crest.

The habits, manners, and haunts of this species are much the same as those of the Golden-Eye, and they return northward about the same time. Latham says "the French allow these birds to be eaten on maigre days and in lent; as they do also the Scoter: but though the flesh of the latter is now and then tolerable, that of the Tufted Duck is seldom otherwise than excellent.

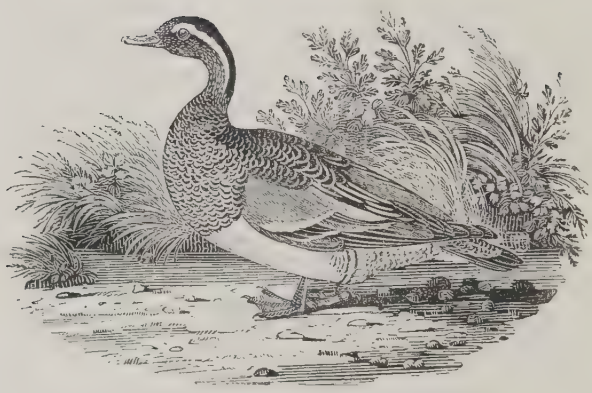
THE HARLEQUIN DUCK.

(*Anas Histrionica*, Gm. Linn.—*Spotted Duck*, Edwards.)

The above figure was made from a specimen shot on the Island of Disko, in Baffin's Bay, in 1826, and presented by Captain Palmer, of the Cove Greenland ship, to the museum of the Literary and Philosophical Society of Newcastle. It had been so very indifferently preserved, and its feathers so dishevelled and misplaced, that the accurate figure and equally accurate description in Edwards's valuable work, were referred to as guides to enable the author to perfect both for the History of British Birds.

The length is seventeen inches; the bill short and black; irides brown; the head and neck are black, glossed in different lights with violet or with green.

A white stripe or patch is placed between the bill and the eyes, and passing above them, changes to a reddish chesnut as it is extended to the nape. From the upper mandible a black line also passes in the same way along the crown of the head to the nape; upon the upper edge of the auriculars, near the eye, is a white spot, whence commences a line of the same colour, which falls down the sides of the neck, nearly its whole length, to where it is crossed by a white band bordered with black; commencing at the hinder part of the neck, and pointing to the breast, another similar white band, also bordered with black, passes nearly from the shoulders to the breast; between these two white lines the feathers are of a deepish ash blue, with lighter margins. The sides, which are mostly hidden by the wings, are of a reddish or rufous chesnut: the belly is brown. The back and tail, upper and under coverts, are glossy black, with a white spot on the sides of the latter: the speculum, or beauty spot, is of a well-grounded violet colour: the scapulars are white in the middle, with black edges: the legs, webs, and toes are blue. This bird seldom strays from the arctic regions. Temminck says, they build their nests by the sides of waters, in the underwood and coarse herbage, and lay ten or twelve eggs of a pure white. They live on spawn, shell-fish, and insects.



THE GARGANEY.

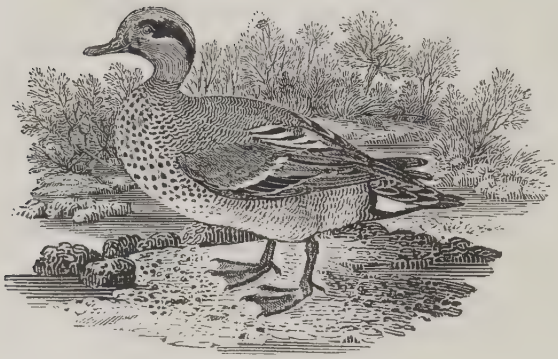
(*Anas Querquedula*, Linn.—*La Sarcelle*, Buff.)

This species, which is only a little bigger than the Teal, is clothed with an elegant plumage, and has altogether a most agreeable and sprightly look. It measures about seventeen inches in length, and twenty-eight in breadth. The bill is of a dark lead colour, nearly black: the irides light hazel. From the crown of the head, over the nape of the neck downwards, it is of a glossy brown: chin black: brow, cheeks, and the upper fore part of the neck, reddish chesnut, with vinous reflections, and sprinkled all over with numerous small pointed white lines. A white stripe passes over each eye, and slanting backwards, falls down on each side of the neck, the lower part of which, with the breast, is light brown, pretty closely crossed with semi-circular bars of black: the shoulders and back are marked nearly the same, but on a darker ground: the

scapulars are long and narrow, and are striped with ash colour, black and white. The belly, in some, is white, in others pale reddish yellow; the lower part of it, and the vent, mottled with dusky spots; the sides are freckled and waved with narrow lines of ash-coloured brown, more and more distinctly marked towards the thighs, behind which this series of feathers terminates in a ribband striped with ash, black, white, and lead-coloured blue. The coverts of the wings are of an agreeable bluish ash, margined with white: next to this the exterior webs of the middle quills are glossy green, tipped with white, and form the beauty spot or spangle of the wings, to which the white tips make a border: the primary quills are ash brown, edged with white: tail dusky: legs lead colour. The foregoing figure and description were taken from a male bird in full and perfect plumage.

"The female has an obscure white mark over each eye: the rest of the plumage is of a brownish ash colour, not unlike the female Teal; but the wing wants the green spot, which sufficiently distinguishes these birds."

It has not yet been noticed whether any of this species ever remain to breed in England, where indeed they are rather a scarce bird.



THE TEAL.

(Anas Crecca, Linn.—*La petite Sarcelle.)*

This beautiful little Duck seldom exceeds eleven ounces in weight, or measures more, stretched out, than fourteen inches and a half in length, and twenty-three and a half in breadth. The bill is of a dark lead colour, tipped with black: irides pale hazel: a glossy bottle-green patch, edged on the upper side with pale brown, and beneath with cream-coloured white, covers each eye, and extends to the nape of the neck: the rest of the head,* and the upper part of the neck, are of a deep reddish chesnut, darkest on the forehead, and freckled on the chin and about the eyes with cream-coloured spots: the hinder part of the neck, the shoulders, part of the scapulars, sides under the wings, and lower belly,

* In some of this species the feathers on the head are lengthened out into a crest: the upper part of which is pale brown, the under deep purple.

towards the vent, are elegantly penciled with black, ash-brown, and white transverse waved lines: the breast, greatly resembling the beautifully spotted appearance of an Indian shell, is of a pale brown or reddish yellow, and each feather is tipped with a roundish heart-shaped black spot: the belly is a cream-coloured white: back and rump ash-brown, each feather freckled and edged with a paler colour: vent black: the primary quills, and lesser and greater coverts, are brown; the last deeply tipped with white, which forms a bar across the wings: the first six of the secondary quills are of a fine velvet black; those next to them, towards the scapulars, are of a most resplendent glossy green, and both are tipped with white, forming the divided black and green bar, or beauty-spot of the wings. The tail consists of fourteen feathers, of a hoary brown colour, with pale edges: the legs and feet are of a dirty lead colour. The female, which is less than the male, is prettily freckled about the head and neck with brown and white. She has not the green patch behind the eyes, but a brown streak there, which extends itself to the nape of the neck: the crown of the head is dark brown: the upper mandible yellow on the edges, olive green on the sides, and olive brown on the ridge; nail black, and the under bill yellow: breast, belly, and vent glossy yellowish white, spotted on the latter parts with brown: the upper plumage is dark brown, each feather bordered with rusty brown, and edged with grey: the wings and legs nearly the same as those of the male.

The Teal is common in England in the winter months, but it is uncertain whether or not they remain

throughout the year to breed,* as is the case in France. The female makes a large nest, composed of soft dried grasses, (and, it is said, the pith of rushes) lined with feathers, and cunningly concealed in a hole among the roots of reeds and bulrushes, near the edge of the water; and some assert that it rests on the surface of the water so as to rise and fall with it. ' The eggs are of the size of those of a Pigeon, six or seven in number, and of a dull white colour, marked with small brownish spots; but it appears that they sometimes lay ten or twelve eggs, for Buffon remarks that that number of young are seen in clusters on the pools, feeding on cresses, wild chervil, &c., and no doubt, as they grow up, they feed like other Ducks, on the various seeds, grasses, and water plants, as well as upon the smaller animated beings with which all stagnant waters are so abundantly stored. The Teal is highly esteemed for the excellent flavour of its flesh.

* Dr. Heysham says, " the Teal is now known to breed in the mosses about Carlisle."

Of the Pelican.

The bill of this genus is long and straight; the end either hooked or sloping; the nostrils placed in a furrow that runs along the sides of the bill, and in most of the species not distinguishable. The face is generally destitute of feathers, being covered only with a bare skin: gullet naked, and capable of great distention: body long, heavy, and flat: legs placed far backward: toes four in number, and all webbed together: outer one longest.

Latham, following the example of Linnæus, includes the Pelican, Man of War bird, Cormorant, Shag, Gannet, and Booby, in this genus, of which he enumerates thirty distinct species, and two varieties: four only of this number, and one variety, are British birds. In confining the present account to these, it is proper to remark, that they are not the inhabitants of this country only, but are widely dispersed over the globe, being met with in almost every climate which navigators have visited, whether temperate, hot, or cold. The Gannet only is migratory: large flocks of this species arrive in the spring of the year, and disperse themselves in colonies over the rocky promontaries of Scotland and its isles, in various parts of which they breed and rear their young; and as soon as that office is performed, they retire in the autumn to their unknown abodes. Their return each season points out also that of the shoals of the herring, which they hover over, pursue, and chiefly feed upon. These shoals, at that season of

increasing warmth, are poured forth on their southern route, gliding forward in wide glittering columns of myriads upon myriads, from the unknown but prolific regions of the north. These prodigious shoals, with their divisions and subdivisions, in their branched course around the British Isles, are attended by the Gannet. On our southern coasts the Pilchard affords these birds another supply of food, in pursuit of which they are enticed as far southward as the Mediterranean sea.

The Cormorant and the Shag remain with us throughout the year, but particularly on our more northern shores, upon whose rocky shelving precipices they station themselves, and perform the offices of incubation; while stragglers, occasionally taking a wider range, with outstretched neck and vigorous wing, sweep along the coast, and entering the mouths of the rivers, follow their course in quest of food, to the lakes inland.

THE CORMORANT.

GREAT BLACK CORMORANT.

(*Pelecanus Carbo*, Linn.—*Le Cormoran*, Buff.)

The weight of this species varies from four to seven pounds, and the size from thirty-two inches to three feet four or five in length, and from four feet to four feet six inches in breadth. The bill, to the corners of the mouth, measures four inches, and on its ridge two and three quarters: it is of a dark horn colour, and the

tip or nail of the upper mandible is much hooked and sharp: from the base of this it is furrowed on each side nearly to the tip, without any visible appearance of nostrils: the lower bill is compressed, and covered about the gape of the mouth with a naked yellowish skin, extended under the chin and throat, where it hangs loose, and forms a kind of pouch, which, together with the springing blades on each side, forming its rim, is capable of distention to a great width, and enables the bird to swallow prey apparently too large to be admitted into its throat: the skin about the eyes is also naked, and of the same colour as the pouch: the eyes, which have a remarkably wild stare, and are placed near the bill, look like two little greenish glass globes. The crown of the head, and the neck, are black: on the hinder part of the former the feathers appear elongated, and form a sort of loose short crest. In some specimens the throat is white, with a kind of stripe passing from it upwards behind each eye; in others the cheeks and throat are mixed with brown and white; and again, in others, the head and neck are streaked with scratches of the latter colour: the middle of the belly is white, with a patch of the same colour over each thigh: all the under parts, however, together with the back and rump, are commonly of a glossy blue black, with green reflections: the shoulders, scapulars, and wing coverts are of a bronze brown, tinged and glossed with green, and each feather is bordered with shining bluish black: the secondary quills are nearly of the same colour: the coverts and the primaries are dusky. The tail consists of fourteen stiff *hasky* dark feathers, which look as if they were discoloured

by being dipped in mud or dirty kennel water, and dried again: the legs are thick, strong, black, and coarse, about two inches and a half long, and the outer toe is more than four in length.

The Cormorant, as before observed, is found in every climate. In Greenland, where it is said they remain throughout the year, the jugular pouch is made use of by the natives as a bladder to float their fishing darts, after they are thrown: their skins, which are tough, are used for garments, and their flesh for food; "but the eggs are too fetid to be eaten even by the Greenlanders."*

These birds usually assemble in flocks on the summits and inaccessible parts of the rocks which overhang, or are surrounded by the sea, upon which the female makes her nest of the withered sea-tang, weeds, sticks, and grasses, which are cast on shore by the waves: she lays four or more greenish white eggs, of the size of those of a Goose, but of a longer shape. There are writers who assert that, in some parts of the world they build their nests on trees, like the Rook and the Heron; other authors, stricken with the singular conformation of the feet† and serrated claw, have ascribed properties to them which they do not possess, and believe that they hold their prey in one foot, while with the other they push forward to the shore, or carry it thither, in the same manner on the wing: but this seems mere conjecture, for the feet of this tribe are not fitted for any such purpose; they are, like those of all the expert divers, placed far behind; and while, by

* Arctic Zoology. This must surely mean the rotten eggs.

† See the cut in the explanation of Technical Terms, vol. 1.

the position of these, and the powerful strokes from their broad webs, the bird is enabled to pursue and take its slippery prey, the hooked sharp-edged beak is the only fit instrument both to catch and to secure it; and there is no need to use the awkward expedient of removing it afterwards to the foot.

At sea, or on the inland lakes, they make a terrible havoc. From the greatest height they drop down upon the object of pursuit, dive after it with the rapidity of a dart, and, with an almost unerring certainty, seize the victim; then emerging, with the fish across the bill, with a kind of twirl, throw it up into the air, and dexterously catching it head foremost, swallow it whole.

While at rest on the shore, commonly on the ledge of a projecting rock, these birds sit more or less in an erect posture, and are propped up by the stiff feathers of the tail; and in places where they have not experienced the fatal effects of the gun, they have been known, however wary at other times, to sit and receive repeated shots, without offering to remove out of the danger.* At other times and places, while they sit in a dozing and stupified state, from the effects of one of their

* Dr. Heysham relates, that about the year 1759, one of these birds "perched upon the castle at Carlisle, and soon afterwards removed to the cathedral, where it was shot at upwards of twenty times without effect: at length a person got upon the cathedral, fired at, and killed it." "In another instance, a flock of fifteen or twenty perched, at the dusk of the evening, in a tree on the banks of the river Esk, near Netherby, the seat of Sir James Graham. A person who saw them settle, fired at random at them in the dark six or seven times, without either killing any or frightening them away: surprised at this, he came again, at day-light, and killed one; whereupon the rest took flight."

customary surfeits, they may easily be taken by throwing nets over them, or by putting a noose around their necks, which they avoid no further than by slipping the head from side to side as long as they can.

Notwithstanding the natural wildness of their disposition, it seems, according to some accounts, that certain species of these birds have formerly been tamed and rendered subservient to the purposes of man, both in this and in other countries. Among the Chinese, it is said, they have frequently been trained to fish, and that some fishermen keep many of them for that purpose, by which they gain a livelihood. "A ring, placed round the neck, hinders the bird from swallowing; its natural appetite joins with the will of its master, and it instantly dives at the word of command; when unable to gorge down the fish it has taken, it returns to the keeper, who secures it to himself. Sometimes, if the fish be too big for one to manage, two will act in concert, one taking it by the head and the other by the tail."* In England, according to Willoughby,† they

* Latham.

† "When they come to the rivers, they take off their hoods, and having tied a leather thong round the lower part of their necks, that they may not swallow down the fish they catch, they throw them into the river. They presently dive under water, and there for a time, with wonderful swiftness, they pursue the fish, and when they have caught them, they arise presently to the top of the water, and pressing the fish lightly with their bills, they swallow them, till each bird hath in this manner swallowed five or six fishes; then their keepers call them to the fist, to which they readily fly, and, little by little, one after another, vomit up all their fish, a little bruised with the nip they gave them with their bills. When they have done fishing, setting the birds on some high place, they loose the string from their necks,

were hood-winked in the manner of the Falcons, till they were let off to fish, and a leather thong was tied round the lower part of their necks, to prevent them swallowing the fish. Whitlock tells us, "that he had a cast of them *manned* like Hawks, which would come to hand." He took much pleasure in them, and relates, that the best he had was one presented to him by Mr. Wood, Master of the Cormorants to Charles I.

This tribe seems possessed of energies not of an ordinary kind; they are of a stern sullen character, with a remarkably keen penetrating eye, and a vigorous body; and their whole deportment carries along with it the appearance of the wary circumspect plunderer, the unrelenting tyrant, and the greedy insatiate glutton, rendered lazy only when the appetite is palled, and then they sit puffing forth the fetid fumes of a gorged stomach, vented occasionally in the disagreeable croakings of their hoarse hollow voice. Such is their portrait, such the character, generally given of them by ornithologists; and Milton seems to have put the finishing hand to it, by making Satan personate the Cormorant, while he surveys, undelighted, the beauties of Paradise.* It ought, however, to be observed, that this bird, like other animals, led only by the cravings of appetite, and directed by instinct, fills the place and pursues the course assigned to it by nature.

leaving the passage to the stomach free and open, and for their reward they throw them part of the prey they have caught, to each, perchance, one or two fishes, which they by the way, as they are falling in the air, will catch most dexterously in their mouths."—*Willoughby.*

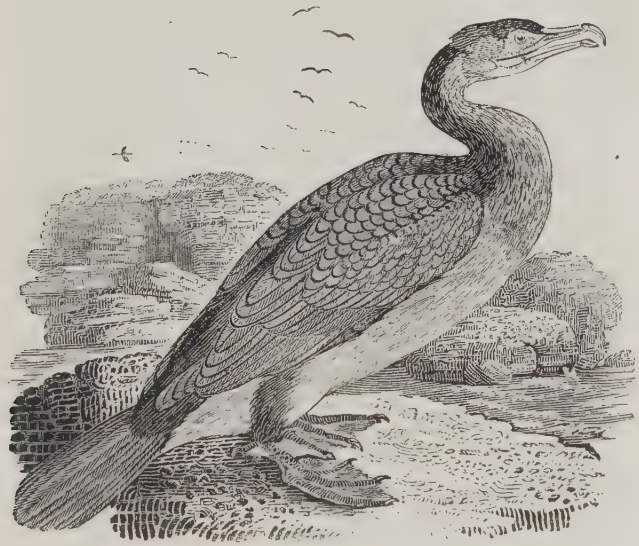
* Paradise Lost, Book iv. l. 194—198.

THE CRESTED CORMORANT.

The crest is black, and longer than that of the Great Black Cormorant: the crown of the head, and nearly the whole neck, are streaked downwards with scratches of white and dusky: a white gorget hangs from the cheeks, and covers the chin; this is bounded behind by a broadish black fillet, which partly covers the auriculars, and is extended to the corner of each eye: a patch of white feathers covers the hinder part of each thigh: the rest of its plumage is the same as that of the preceding species; its character is also similar.

It is not yet clearly ascertained whether this is a variety of the last, or a distinct species, or whether it is the Cormorant in the garb of its highest adult state.* Latham inclines to the latter opinion, and supposes the streaked head and different markings of its plumage to be acquired only by age. Buffon, in his *Planches Enluminées*, has given its figure as the Cormorant; and Pennant, differing from them, makes it a species of the Shag. Mr. Tunstall was in doubt on this subject, but discovered, by dissection, that the whiteness under the chin and on the thighs, is not confined to the males, for one with these marks, which was sent to him out of Holderness, in Yorkshire, in 1775, was full of eggs. The above figure was taken from the specimen in his museum.

* Montagu says, "this is no other than a variety of the common Cormorant, in the summer or breeding dress."



THE SHAG.

SKART, SCARFE, OR GREEN CORMORANT.

(*Pelecanus graculus*, Linn.—*Le petit Cormoran, ou le Nigaud*, Buff.)

The form, the aspect altogether, the outward conformation of all the parts, the character, manners, and habits, and the places of abode, of this species, are nearly like those of the Cormorant; but they do not associate, and these make their nests on the rugged shelvy sides and crevices of the rocky precipices or projecting cliffs which overhang the sea, while the others make theirs on the summits above them; and these are at once distinguished from the others by the

greenness of the upper, and brownness of the under plumage, and also in being of a much less size; the largest Shags weighing only about four pounds, and measuring nearly two feet six inches in length, and three feet eight in breadth. The bill is of a more slender make, but nearly as long as that of the Cormorant; the head, in the male, is crested in the same manner; the middle claw is serrated; and its tail, consisting of twelve stiff feathers stained with green, is also of the same form, and hoary or dirty appearance, as that of the Cormorant: the crown of the head, hinder part of the neck, lower back, and rump, are of a plain black, or very dark green, shining like satin: the upper back, or shoulders, together with the scapulars and wings, are nearly of the same colour, but with a tinge of bronze brown, and each feather is distinctly edged with purple glossed black: the under parts are clouded with dusky dirty white and brown.

The Shag is as greedy and voracious as the Cormorant, and, like that bird, after having over-gorged its stomach, is often found on shore in a sleepy or stupified state; but when this torpor is over, and they appear again upon the water, they are then extremely alert, and are not easily shot, for both kinds dive the instant they see the flash of the gun, and take care afterwards to keep out of its reach. In swimming they carry their head very erect, while the body seems nearly submerged, and from their feathers not being quite impervious to the water, they do not remain very long upon it at a time, but are frequently seen flying about, or sitting on the rocks, flapping the moisture from their wings, or keeping them for some time expanded, to dry

in the sun and the wind. Notwithstanding the strong and offensive smell emitted from the Shags and the Cormorants, some instances are not wanting of their having been eaten in this country; but before they are cooked, they must undergo a certain sweetening process, part of which consists in their being first skinned and drawn, and then wrapped up in a clean cloth, and buried for some time in the earth; after which they are made ready for eating in various ways, though generally potted like Moor Game.

THE GANNET.

GAN, SOLAND OR SOLAN GOOSE.

(*Pelecanus Bassanus*, Linn.—*Le Fou de Bassan*, Buff.)

The Gannet is generally about seven pounds in weight, three feet in length, and six in breadth. The bill is of a pale or lead-coloured blue, six inches long, a little jagged on the edges, strong and straight to the tip, which is inclined a little downwards: the upper bill is furnished with a distinct rib or ridge, running along from the tip nearly to its base, on each side of which it is furrowed, without any visible appearance of nostrils: the tongue is small, and placed far within the mouth, all the inside of which is black: a darkish

line passes from the brow over the eyes, which are surrounded with a naked blue skin, and, like those of the Owl, are set in the head so as to look nearly straight forward, and the extreme paleness of the irides gives them a keen wild stare. The gape of the mouth is very wide, and seems more lengthened, by a slip of naked black skin, which is extended on each side from the corners beyond the cheeks: these features of its countenance, altogether, give it somewhat the appearance of wearing spectacles. A loose black bare dilatable skin, capable of great distension, hung from the blades of the under bill, and extended over the throat, serves it as a pouch to carry provisions to its mate, or its young. The body is flat and well cloathed with feathers; the neck long: the crown of the head, nape, and, in some specimens, the hinder part of the neck, are of a buff colour; greater quills and bastard wings black, and the rest of the plumage white. The tail is wedge-shaped, and consists of twelve tapering sharp-pointed feathers, the middle ones the longest. The legs and feet are nearly of the same colour and conformation as those of the Cormorant, but they are curiously marked by a pea-green stripe, which runs down the front of each leg, and branches off along the toes. The male and female are nearly alike, but the young birds, during the first year, appear as if they were of a distinct species, for their plumage is then of a dusky colour, speckled all over with triangular white spots.

They make their nests in the caverns and fissures, or on the ledges of the louring precipice, as well as on the plain surface of the ground: it is formed of a great

quantity of withered grasses and sea-weeds of various kinds, gathered with much labour from the barren soil, or picked up floating about upon the water. The female lays three white eggs, somewhat less than those of a Goose, although ornithologists assert that she will lay only one egg, if left to herself undisturbed, and that when this egg is taken away she then lays a second, and in like manner a third, which she is generally permitted to hatch, and rear the young one.* "The male and female hatch and fish by turns; the fisher returns to the nest with five or six herrings in its gorget, all entire and undigested, which the hatcher pulls out from the throat of its provider, and swallows them, making at the same time a loud noise."

These birds are common on the coasts of Norway and Iceland, and are said to be met with in great numbers about New Holland and New Zealand; they breed also on the coasts of Newfoundland, and migrate southward along the American shores as far as South Carolina: they are noticed, indeed, by navigators, as being met with, dispersed over both hemispheres, and are probably one great family spread over the whole globe; but their greatest known rendezvous is the Hebrides and other solitary rocky isles of North Britain, where their nests, in the months of May and

* "The Solan Geese have always some of their number that keep watch in the night time, and if the sentinel is surprised, (as it often happens) all that flock are taken, one after another; but if the sentinel be awake at the approach of the creeping fowlers, and hear a noise, he cries softly *Grog, Grog,* at which the flock do not move; but if this sentinel see or hear the fowler approaching, he cries softly *Bir, Bir,* which would seem to import danger, since immediately after, all the tribe take wing, leaving the disappointed fowlers without any prospect of success for that night."—*Martin.*

June, are described as so closely placed together, that it is difficult to walk without treading upon some of them; and it is said that the swarms of the old birds are so prodigious, that when they rise into the air, they stun the ear with their noise, and over-shadow the ground like the clouds.* Besides the small isle of Borea, and St. Kilda, noticed by Martin, Pennant and other writers mention the isle of Ailsa, in the Frith of Clyde; the Stack of Souliskerry, near the Orkneys; the Skellig Isles, off the coast of Kerry, Ireland; and the Bass Isle, in the Frith of Forth. The last-mentioned isle is farmed out at a considerable rent, for the eggs of the various kinds of water fowl with which it swarms; and the produce of the Solan Geese forms a large portion of this rent; for great numbers of their young ones are taken every season, and sold in Edinburgh, where they are esteemed a favourite dish, being generally roasted, and eaten before dinner. On the other bleak and bare isles, the inhabitants, during a great part of the year, depend for their support upon these birds and their eggs, which are taken in amazing numbers, and are the principle articles of their food.†

* Martin, in his History of and Voyage to St. Kilda, published in 1698, says, the inhabitants of St. Kilda take their measures from the flight of these fowls, when the heavens are not clear, as from a sure compass, experience shewing that every tribe of fowls bend their course to their respective quarters, though out of sight of the isle; this appeared clearly in our gradual advances; and their motion being compared, did exactly quadrate with our compass."

† They preserve the eggs in stone huts or pyramids, which they build for that purpose, as well as for a shelter to the fowlers: in these pyramids they cover up the eggs with turf ashes, which defend them from the air, dryness being their only preservative, and moisture their corruption: by this method, it is said, they keep them fresh and fit for use, for six, seven, or even for eight months."—*Martin.*

From the nests placed upon the ground the eggs are easily picked up one after another, in great numbers, as fast as they are laid; but in robbing the nests built in the precipices, chiefly for the sake of the birds, the business wears a very different aspect: there, before the dearly-earned booty can be secured, the adventurous fowler, trained to it from his youth, and familiarised to the danger, must first approach the brow of the fearful precipice, to view and to trace his progress on the broken pendent rocks beneath him: over these rocks, which (perhaps a hundred fathoms lower) are dashed by the foaming surge, he is from a prodigious height about to be suspended. After addressing himself in prayer to the Supreme Disposer of events, with a mind prepared for the arduous task, he is let down by a rope, either held fast by his comrades, or fixed into the ground on the summit, with his signal cord, his pole-net, his pole-hook, &c., and thus equipped, he is enabled in his progress either to stop, to ascend, or descend, as he sees occasion. Sometimes by swinging himself from one ledge to another, with the help of his hook, he mounts upwards, and clambers from place to place; and, at other opportunities, by springing backwards, he can dart himself into the hollow caverns of the projecting rock, which he commonly finds well stored with the objects of his pursuit, whence the plunder, chiefly consisting of the full-grown young birds, is drawn up to the top, or tossed down to the boat at the bottom, according to the situation of concurring circumstances of time and place. In these hollows he takes his rest, and sometimes remains during the night, especially when they happen to be at such vast and

stupendous heights. To others of less magnitude the fowlers commonly climb from the bottom, with the help of their hooked poles only, by which they assist, and push or pull up each other from hold to hold, and in this manner traverse the whole front of the frightful scar. To a feeling mind the very sight of this hazardous employment, in whatever way it is pursued, is painful; for, indeed, it often happens that these adventurous poor men, in this mode of obtaining their living, slip their hold, are precipitated from one projection to another, with increasing velocity, and fall mangled upon the rocks, or are for ever buried in the abyss beneath.

BEARDED VULTURE.

(*Vultur barbatus*, Linn.—*Le Vautour barbu*, Briss.)

CRESTED VULTURE.

(*Vultur Harpia*, Linn.—*L'Aigle huppé du Bresil*, Briss.)

SECRETARY,

OR SNAKE EATER.

(*Messager du Cap de Bonne Esperance*, Buff.)

THE SAPPHIRE CROWNED PAROQUET.

(*Petite Perruche du Pérou,* Buff.)

THE LITTLE GUINEA PAROQUET.

(*Psittacus pullarius,* Linn.—*La Perruche à tête rouge,* Buff.)

THE RING PAROQUET.

(*La Perruche à Collier*, Buff.)

THE GOLDEN WINGED PAROQUET.

(*Psittacus chrysopterus*, Linn.—*La Perruche aux ailes d'or*, Buff.)

THE SILKY STARLING.

THE THREE-TOED WOODPECKER.

(*L'Epeiche ou P Varié ondè*, Buff.)

THE ASH COLOURED BUZZARD.

(Le Faucon de la Baye d'Hudson, Buff.)

THE LITTLE BLACK AND ORANGE COLOURED INDIAN HAWK.

THE FORK-TAILED INDIAN SHRIKE.

Lanius forficatus.

THE CRESTED GRAKLE.

(*Gracula christatella*, Linn.)

THE MINO.

MINOR.

(*Gracula Calva*, Linn.)

PRINTED BY CHARLES HENRY COOK, NEWCASTLE.